

A vintage 'Lockout Tools Kit' by STECK, featuring six red-handled locking pliers and two wooden-handled tools, all in their original blister pack. The packaging is white with a red and white striped banner at the top. The text on the package includes 'STECK', 'NEW DESIGN', 'LOCKOUT TOOLS KIT', 'LOCKING PLIERS &amp; AIR LINE HOSES', and 'WELDED IN STEEL CASES'. The tools are arranged in two rows: the top row has four red-handled locking pliers, and the bottom row has two wooden-handled tools. The entire kit is shown against a blue background.





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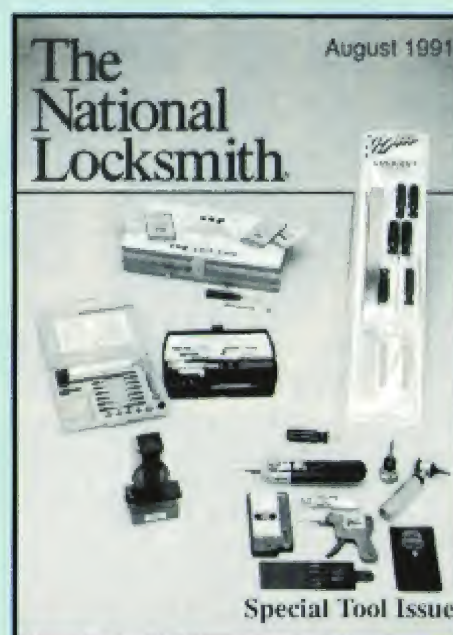
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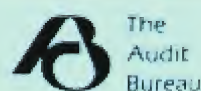
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Featured on this month's cover you will find tools from the following manufacturers (in alphabetical order): ESP Lock Corp., HPC, Inc., Leading Edge Tool, Silca Key Services, and Steck Manufacturing.

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# Commentary

## Will True Value Hardware Stores Replace The Locksmith?

The profession of locksmithing has taken a few hard hits over the last ten or fifteen years. Perhaps the biggest problem locksmiths now face is staying competitive in the marketplace. After all, the chain hardware stores now sell many more locks than do the locksmiths. Also, it is hard for the locksmith to compete with the hardware store's prices. Chain hardware stores can get better discounts because they are able to buy in enormous quantities. Therefore, when it comes to selling merchandise, often the locksmith loses out.

For the past number of years, locksmiths have been told by the manufacturers to concentrate on selling our *services*. Servicing the customer with our specialized knowledge is now about the only thing that sets us apart from the hardware store. The customer can go to any hardware store to get a key made. But at least he comes to a locksmith when he needs masterkeying or recombining, right?

But what would happen to our industry if every True Value hardware store, for example, offered not only to sell locks, but also offered a full range of *locksmith services*? Boy, that could really affect our ability to earn a living, couldn't it?

As we speak, more than one manufacturer is working with chain store operators in an effort to enable the chains to sell more of their products. We must understand that the manufacturer's primary duty is to make and sell as much product as possible. But there are many companies who relied on locksmiths for years to help them accomplish their sales goals, and are now turning in a big way to the hardware stores.

As an example of what we are talking about, let's examine the case of Ilco Unican Corp. Understand that we are looking at them as one example; other companies are also doing some similar things. Ilco Unican is a large manufacturer of key blanks, locks and safe locks. Their divisions include among others: Locksmith Ledger magazine, Simplex, Taylor, Dominion and PPI.

Ilco Unican has put together a seminar program offering to train True Value hardware store personnel all over the United States in a variety of locksmith services. Let me paraphrase what was said to True Value hardware stores in a recent mailing to them by Ilco Unican:

The major portion of hardware retailers already have a key cutting department. The majority of hardware stores already

sell locks. But very few hardware stores can repin locks or key them alike. This is one profitable technique to be taught during this program.

The Ilco mailing then states that it is only a logical step for True Value hardware stores to "enter the field of basic locksmithing" and profit from the locksmith services which the stores can offer to their customers.

The mailing further says, "The objective of this course is to teach the necessary basic locksmithing skills to the hardware dealers to enable them to offer these profitable services to their customers."

The brochure mailed to True Value hardware stores by Ilco goes on to note the following question and answer:

"Who should attend? Hardware dealers and novice locksmiths who currently sell locks and feature keycutting equipment in their stores that want to expand their store service programs."

Further, the brochure explains that the seminars will be conducted by Steve Spiwak, a "master locksmith and veteran lecturer." What the brochure does not mention is that Steve Spiwak is currently listed in Locksmith Ledger's masthead as their Features Editor.

Continued on page 82.



*Marc Goldberg*  
Editor/Publisher

August 5



# Letters

## Comments, Suggestions and Criticisms

*The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length. Please address your comments, praise, or criticism to Editor, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107. All letters to the editor must be signed.*

### Three Cheers For Sean DeForrest

Dear Marc:

Three cheers for your guest editorialist Sean DeForrest. His article in the June 1991 issue of *The National Locksmith*, "End The Trade Show Madness," was accurate and timely.

We at Hayman Safe Company agree, that education in the industry is of paramount importance. Hayman Safe Company offers continuing education courses with the emphasis being on Sales & Marketing.

We open ourselves to contact by you and/or ALOA for service in this area.

Don Jenson  
Florida

### Reader Defends Trade Shows

Dear Marc:

Who is this Sean DeForrest that wrote the Guest Editorial in the June issue? More to the point, what could have been his motive for writing such an article?

I had to wonder why he took it upon himself to represent and be a spokesman for all the industry manufacturers and indicate that they were not wanting to be a part of the association's conventions and trade shows.

I certainly think all manufacturers and distributors in their annual budget set aside an amount to be spent on advertising. What better way to spend this money to the company's best

advantage than to use it displaying their wares, meeting with locksmiths, talking with the locksmith and answering their questions about new products or products which have been modified and improved.

As for Mr. DeForrest's new solution all I could see was ALOA, ALOA, ALOA.

In my opinion ALOA is a learning institute. It does have good instructors and I am told that the classroom presentations are usually of a good quality. You can also find this same type of setting at your local college.

If the exhibitors are concerned about saving money why would they be willing to donate to any gathering of locksmiths to supplement their training classes? I wouldn't really care what company gave to supplement a class if I was still required to pay a fee to participate. For myself I would say the exhibitors would be throwing their money down a big hole if this was their way of trying to stay in touch with the locksmith.

I have always enjoyed attending the trade shows and locksmith conventions. I hope things stay as they are for our future. I know my attendance would be very limited if I knew there were to be no exhibits at the gatherings.

Ken Holton  
Texas

### Locksmith On Duty Threatened With Arrest

Dear Marc:

Recently I was threatened with arrest if I didn't leave the site of a vehicle lockout, by a police officer who was jamming and jerking a long, flat piece of steel, inside the door of a new looking vehicle.

Quite a few people were standing around watching this officer try to force open a late model vehicle, with a very

easy-to-make tool, often used in auto theft and burglary. While the officer was teaching the bystanders how to use the poke and stab, hit and miss method of violating a vehicle open, I was watching a finger shaking at me and listening to my legally obtained customer say, "Why should I pay you anything when you only drove 15 minutes, and I can get my vehicle open for free?"

I reminded my customer of the legal verbal contract that he agreed on over the telephone, and he responded with a weasel-like attitude of, "So sue me!"

Asking for half of my service call, I was told to leave by the police officer, and was now starting to get hit by some scud missiles from my customer's wife, from the back side, "Why should we pay you?"

A badger on one side and a weasel on the other side, and a police officer spending public tax dollars trying to force open a vehicle, educating the bystanders on how to use a common burglary tool, and causing a violation of a verbal contract between two citizens, therefore creating a civil suit and costing the taxpayers even more.

In the process of possibly damaging my customer's vehicle, and costing the public even more tax dollars, the officer threatened me again with arrest for disturbing the peace, and began calling for another squad car when I asked for his badge number.

Obviously, it was time to leave, and I left reminding the officer that he was clearly helping a dishonest person avoid paying for my promised service call charge for a non-emergency lockout, and encouraging others to do the same. This unethical, "customer stealing" has happened at least five times in this same city over the past years, and I'm ready to fight.

I understand when people write in

*Continued on page 8*



*Continued from page 6*

and suggest getting more commercial accounts, or concentrating on other phases of locksmithing, or even giving up lockouts altogether in that particular city. I also understand that losing five calls isn't all that bad in three years, but these weren't your ordinary dishonest people trying to weasel out of paying money for their own absent mindedness, or neglect; these were people being encouraged or coached by the police and fire department to ignore any promises made to the locksmith, and also encouraged to lock their keys in their vehicle any time they want, no matter what the reason.

Speaking of reasons here are some reasons that people call 911 emergency, and get their vehicle opened at the taxpayers expense: 1) The person is lazy and too cheap to get a spare key. 2) The person gets a spare key and keeps it on the same ring with the original. 3) The person uses the hidden spare key and doesn't put it back. 4) The person is high on drugs or alcohol at the time of the lockout. 5) The person is recovering from a hangover at the time of the lockout. 6) The person is in a hurry, distracted, confused, angry, depressed

or late for work, and isn't thinking right at the time of the lockout.

Sure, there are other reasons. Some are honest mistakes that happen to honest, reliable citizens. Most honest, reliable citizens are willing to pay for their mistake and would rather have a professional locksmith, with the proper training, and proper tools open their vehicle.

I have opened vehicles for elderly persons with little, or no money, at no charge. I have opened vehicles with babies inside, for whatever the parent wanted to pay, usually getting my standard fee. I have let an animal control officer into a vehicle to save a dog in ninety degree heat, for free. I have even let a police officer into his own squad car for no charge. Sometimes, "thank you" is payment enough.

But we all have to make a living, and should pay our taxes. It is time for city officials to protect the citizen's tax money, and to stop encouraging people not to worry about being irresponsible, and to stop causing civil lawsuits.

Think about it: If a drug dealer is using too much of his product, and is

late for a big sale, then discovers himself locked out of his vehicle, some cities will spend public funds to help him on his way. I have actually been offered cocaine to pay for a lockout, and after refusing, I was paid from a huge roll of cash.

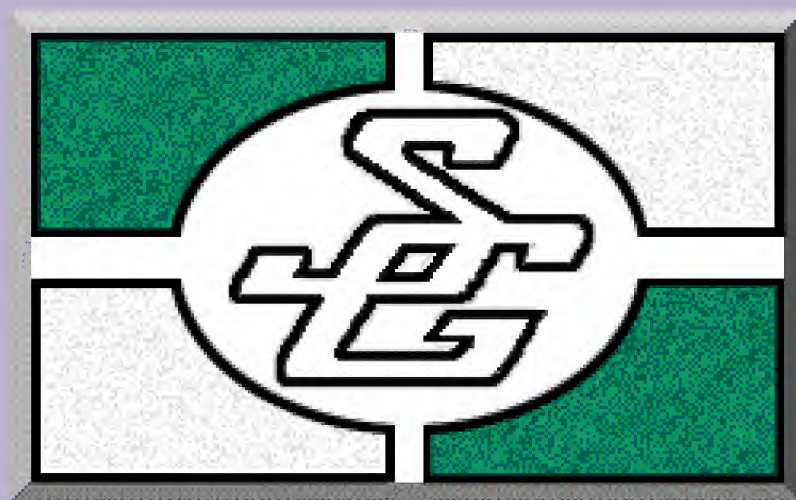
The bottom line is, if a person can afford to own and maintain a vehicle, they can afford to purchase a spare key. If this person is not responsible enough to make sure the spare is available in case of a lockout, don't make the taxpayers pay for it, make them call a locksmith.

If I never received any vehicle lockout calls, because everyone had a spare key, it would be tough luck for me. But in my area, it's the police and fire departments that are keeping me from getting a lot of the non-emergency lockouts, and at times directly interfering with my legally obtained customers.

Put up your dukes city hall, I'm ready to fight.

Charles Frazer  
California

*Continued on page 80*



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# Enter the 1991 Technitips Contest

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## First Prize



### Silca's Club Jr.

This easy to operate key duplicating machine makes the popular Laser-Sidewinder auto keys. It also duplicates various automotive and commercial high security keys.

## Second Prize



### HPC's One Machine

The One Machine is a semi-automatic, durable and accurate duplicating machine designed to cut several hundred keys per day, effortlessly. It cuts standard cylinder keys, plus most foreign automotive keys.

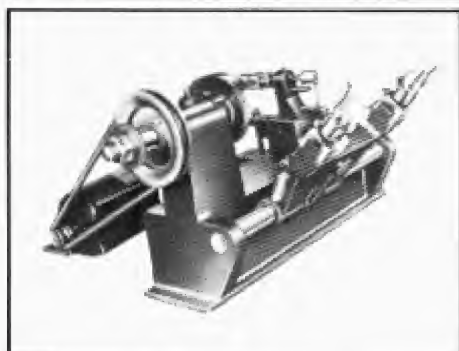
## Third Prize



### ESP 660

The model 660 key machine can be used for manual cutting or, with the flip of a switch, it will cut keys automatically. It is designed to accommodate large head keys such as hotel and foreign auto blanks.

## Fourth Prize



### Belsaw 200

Duplicate, cut by code, cut flat steel keys. Complete machine with motor, three cutters, guides, and instructions. Built-in micrometer.

## Fifth Prize



### HPC 9120

HPC's newest and most compact key cutting machine features reversible jaws. Double-sided copy dog cuts flat steel and safety deposit keys and has softy brush. Excellent versatile machine.

## Sixth Prize



### \$100 Cash & Flat Rate Manual

\$100.00 in cash will brighten your day! So will the *Flat Rate Manual for Locksmiths*. The manual will help you price your services for profit. You won't ever have to guess how to price again.

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Code Books From *The National Locksmith*

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## Seventh Prize



### General Code Book Set (NGCB)

These three books contain 450,000 codes covering domestic lock and automobile codes.

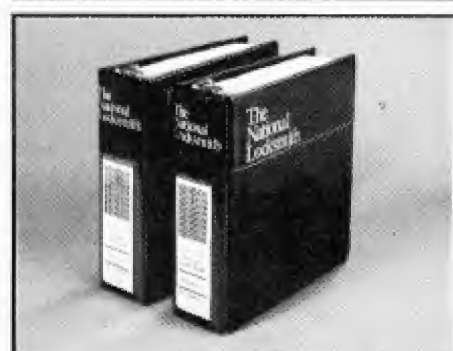
## Eighth Prize



### Padlock Code Book Set (NPCB)

These three volumes offer 462,000 covering Dudley, American (Junkunc), Master and Yale.

## Ninth Prize



### Foreign Code Book Set (NFCB)

This two volume set holds 432,000 codes for the complete variety of foreign codes, from Alpha Romeo to Yugo.



# Technitips

Helpful Hints from Fellow Locksmiths



Send me your Technitips. Who knows, you may be our next winner! c/o The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107.

by Robert Sieveking

*Congratulations to all those who find their Technitips printed this month. There remain only four more months in the '91 Technitips contest, to get those winning entries into the mail. So, get busy and write. As you read what you have written, imagine that you are explaining the technique to someone that is unfamiliar with your trick. Many times I find that I can not reconstruct a particular Technitip.*

*Many Tips take the form of "emergency" methods. Good planning, preparation and the proper tools for any particular job are the mark of the professional. Anything less, is usually the result of poor planning, lack of preparation, or unwillingness to purchase the tools necessary to do the job right.*

*Everyone is searching for a "new"*

*or "other" way of doing a particular job. As you read Technitips, you may see a Tip that you have seen before. I hope that you find its presentation new. Many times I find myself discounting some Tip, because I have always thought of it as "the way it is done." What we overlook is that there are many new locksmiths, that have never seen this particular method or Tip. If*

*you have an old Tip that you find particularly relevant to today's locksmith, think about writing it up and getting it in the mail. Your old Technitip just might win you a new key machine. Locksmith bucks are the easy way to purchase some of the most up to date and complete books on locksmithing available anywhere.*

## Win a VATS Decoder From All-Lock!

Each month, All-Lock will award one of their A-7000 VATS Decoders and an A-7001 Adaptor to the best automotive Technitip submitted this month. If you would like a chance to win a free decoder and adaptor from All-Lock, simply submit your automotive tip exclusively to *The National Locksmith*. Tips submitted to other publications cannot be considered.

All-Lock's A-7000 makes it easy to diagnose system failures, service the column and select the correct key blank. This sophisticated tool is easy to use and is completely portable. Long wire leads are easy to use in cramped automotive situations.

Submit your tip, and win today!



## How To Enter

All you need to do to enter is submit a tip, covering any aspect of locksmithing to *The National Locksmith*. Certainly, you have a favorite way of doing things that you'd like to share with other locksmiths. Why not write it down and submit it to: Robert Sieveking, Technitips' Editor, *The National Locksmith*, 1533 Burgundy Parkway, Streamwood, IL 60107.

Tips submitted to other industry publications will **not be eligible**! So get busy and send in your tips today. You may win cash merchandise, or even one of many key machines or code book sets! At the end of the year, we choose the winners of the listed prizes.

Last year dozens of people walked off with money and prizes. Wouldn't you like to be one of the prize winners for 1991? Enter today! It's a lot easier than you think!

## Every Tip Wins 'Locksmith Bucks!'

Yes, every tip published wins a prize. But remember, you must submit your tip to *The National Locksmith* exclusively. Each and every tip published in Technitips wins you \$25.00 in Locksmith Bucks! Use this spendable cash toward the purchase of any books or merchandise from *The National Locksmith*. You also receive a Bonded Locksmith bumper sticker and decal. Plus you are now eligible for the really big prizes!

## Best Tip of the month prizes!

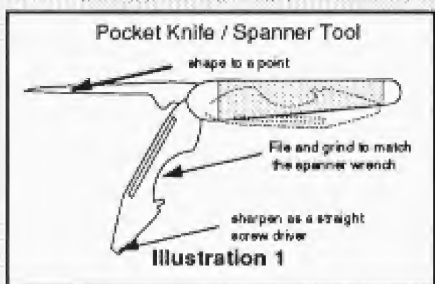
If your tip is chosen as the best tip of the month, you will win \$50.00 in cash as well as \$35.00 in Locksmith Bucks! Plus you will receive a quartz Locksmith watch, a Bonded Locksmith bumper sticker, decal and a Locksmith Cap. Plus, you may win one of the annual prizes.



## August's Best Tip

This Technitip is for a handy and easy to make tool that you can make from an old pocket knife.

I work with many Schlage and Sargent heavy duty locksets. One of the most common problems for these locksets, when installed on hollow metal commercial doors, is loosening of the lockset attaching collars. It seems like every time I run into a loose lockset, I find that my spanner wrench is either in the truck or missing. To save a few of those trips to the truck, and the possibility of not having the right tool, I made the pocket spanner tool you see in illustration one. The large blade of the folding knife has been filed and ground to the shape of a spanner wrench and the smaller blade has



been shaped to a point, as a scribe or poke tool. The tip of the large blade is shaped to a squared point, for use with a screwdriver. If you take the time to make one of these folding pocket tools, I'm sure you will find it very handy.

Stan Finn  
Oregon

\*\*\*\*\*

## Automotive Tip of the Month

**This tip is the winner of the All-Lock A-7000 VATS Decoder and the A7001 Adapter. All-Lock will award this package to the best automotive tip each month of the year.**

The following tip is for those who have not encountered the new 1991 Ford Escort LX. In this vehicle only one key is used (primary key H54) for the function of the ignition, doors and trunk. I found the trunk lock to be the easiest to remove. After the lock is disassembled you will find six wafers. The tumbler position on these locks is different from that of the 1984 1/2 and up vehicles. The tumbler positions found on these locks are 2,3,4,5,6 and 7. Tumbler positions 8, 9, and 10 are not used in the vehicle. The only

remaining tumbler, in position number 1, is found in the ignition lock only. This cut can be easily found through the process of elimination.

Armando Martinez  
Florida

\*\*\*\*\*

I don't know if this Technitip has been in the magazine or not. I've been reading your column for about ten years, and don't remember ever seeing it. This Tip is aimed at folks that have more than one Ford Motor Co. vehicle, and would like to cut down on the number of keys they have to carry. It is really quite simple, and I have been doing it for years.

Take a Ford blank, ignition or door, and cut one side of the key for one vehicle and the opposite side for the second vehicle. The double sided Ford cylinders only use one side of the blank, so you will now have a key that will operate either vehicle. File a groove or notch in one side of the key head for identification, as you see in illustration two. This will allow you to identify which side of the key to use for either vehicle. It may take a few tries to

*Continued on page 14*



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Continued from page 12

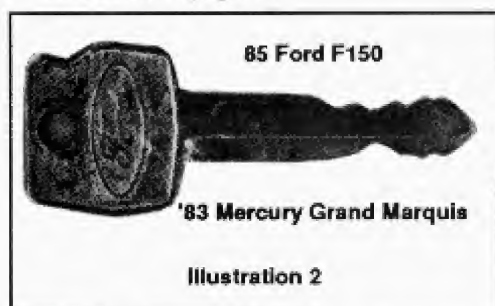


Illustration 2

remember which the groove represents, but then it will become second nature.

James McKee  
New Hampshire

\*\*\*\*\*

Like most locksmiths, I am constantly faced with the need to remove automotive door cylinders. This can sometimes become a difficult, and downright dangerous, task. I can't tell you how many times I've cut or nicked my hands and knuckle on the inside of the door. I decided that there had to be a better, or at least easier way to remove those door clips. I found a tire tool, as you see in illustration three, that had a lug wrench on one end and a chisel tip on the other. Using a hacksaw, I cut a slot in the end of the tire tool.

To make the tip of the new tool hold the clip securely, I inserted a retainer

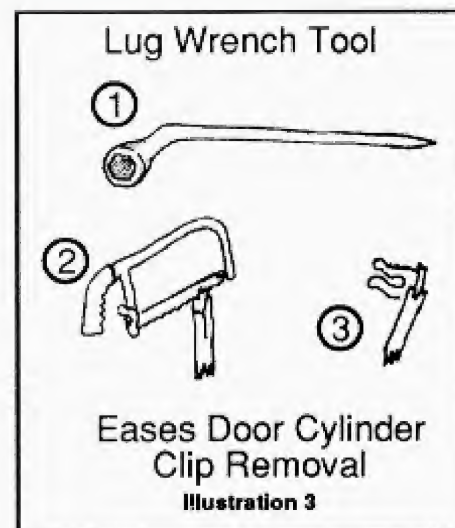


Illustration 3

clip into the tip of the tool and closed the saw slot with a hammer. After removing the clip, I was able to insert the tool into the door of a car and push the slot over the retainer. With a little twist and some sideways movement of the tool, the clip slid off the lock cylinder. The clip remains attached to the removal tool because of the snug fit of the tip. The same tool eases installation also.

I am aware that there are tools on the market that do the same job, but the small size of the tip of the lug wrench will reach into areas that the other's can't. This Tip has saved my hands from cuts and nicks, and I'm sure it will do the same for other locksmiths.

Jim Clinton  
Washington

\*\*\*\*\*

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This Tip deals with a rather unusual type of combination lock. The lock is found on a Supra C key box, which at first glance might be mistaken for a large combination padlock. The dial is on the front side of the box, and looks very much like a miniature safe dial. The dial is lettered from A to Z. This is a three wheel lock, with two gates per wheel. The gates are not of the usual variety, since they are just grooves or pockets into which a two pronged fence enters. Any attempt to align the gates by drilling a hole near the dial will be futile. If you are asked to open one of these for the owner, you will find that the door bolt is spring loaded. The door opens from the top, but has no hinges.

Mark the box 1" from the left, on the top side, then measure 7/16" from the front edge and drill a 7/64" hole through the case, which is about 3/16" thick at this point. By inserting a piece of stiff wire into the hole, you can push the bolt back to open the door. Decode the combination with the door open and



repair the hole with a .115" pin. Drive the pin into the hole in the case, and file or grind it level with the case.

Ronald Bearden  
Alabama

\*\*\*\*\*

This Tip concerns reassembling the Kwikset 500WL Lever locks. As you know, a removal key is included with each new lock. The problem arises when you need to change the cylinder to a new key. Unless you are operating in a master keyed system, which allows you to have "one" master/cylinder removal key, the lock must be removed from the door to release and remove the lock cylinder for service. If the lockset is off the door, it is an easy job to pull on the lock actuator, while turning the plug 180 degrees with the operating key, to remove the cylinder for service.

To replace a cylinder into a mounted lock, when a cylinder removal key is not available, it is sometimes possible to rotate the blade actuator, at the rear of the knob spindle hole, out of the normal "horizontal" position. The actuator can be rotated either left or right. When replacing the lever handle and cylinder into the knob spindle, the actuator blade will not engage the rear of the lock plug as it is rotated into position to remove the key. After installing the lever and cylinder, rotate the locking button, on the inside lever, to cause the actuator blade to drop into the slot in the rear of the cylinder plug.

Always check the lock, to make sure the key will operate "properly," before closing the door. There's nothing more embarrassing than having to knock at the door, and ask your customer to let you in, because you accidentally assembled his lock wrong and locked yourself out.

Robert Rilloraza  
Canada

\*\*\*\*\*

I have had several occasions when a door with a safety chain was in place was the best lock to pick. I have devised a tool that makes removing the chain from its slot easy and simple. I made mine from a piece of 1/4" flat spring steel with the "V" section soldered on. It could be made however with different flat metal. The "V" section is used as a guide on the chain to reach the button and lift from its entrance slot. Illustration four is a drawing of mine. I hope it will help others.

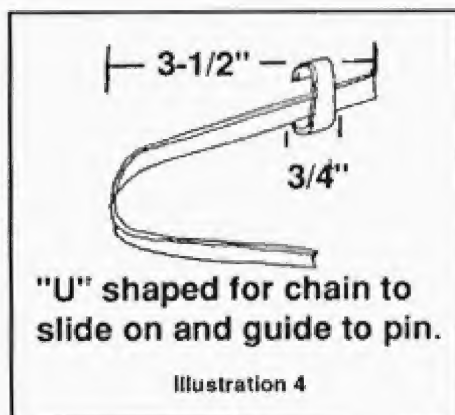


Illustration 4

Walter Thompson  
Georgia

\*\*\*\*\*

I was called to repair a Weslock deadbolt in a metal door and needed a drive-in latch. I did not have a Weslock latch with me, so I substituted a Schlage

drive-in latch instead. It worked fine. Product substitution on repairs although not warrantable, is never the less sometimes the only way to complete some jobs.

Juanita Ramsey  
Texas

\*\*\*\*\*

I am sending this tip for a problem that is just beginning to develop here in Memphis. Several years ago, ornamental security door companies began offering Papaiz locks on inexpensive iron security doors. The Brazilian made lock uses .092 Dia. pins, with spool drive pins in all 5 top chambers. This double cylinder profile lock is drilled, combined and capped from the top much like most foreign one piece brass padlocks. This makes it difficult and time consuming to pick or



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repin these locks. I am unaware of a pinning kit for these locks, but you can easily use Chrysler .100 dia. pins to combine these cylinders.

Faced with a lockout, and being unable to pick the cylinder after a reasonable time, this is how I handled the job.

I measured 4mm from the bottom and center punched a point to drill. Using a 1/8" bit I drilled through 5 chambers taking care to keep the bit level. (See illustration 5.) Hook the springs with an extractor, and pull them out one by one. With a standard hook pick, push the pins down into the upper pin chamber, and rotate the plug with a screwdriver to open. The plug has to spin twice before the bolt is fully retracted.

#### To defeat a Papaiz cylinder

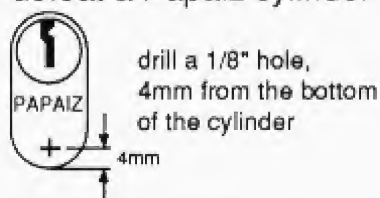


Illustration 5

This entry method leaves the cylinder in a repairable condition, but it is much easier to replace the cylinder

with a new one.

Lou Koulogianes  
Tennessee

*Editor's Note: If you can't pick a cylinder, impression a key to it. Spool and mushroom pins are ineffective against impression. Like many things, these cylinders are not designed to be serviced.*

\*\*\*\*\*

If you've ever needed a way to chuck up a wire brush in your drill motor, or needed a small arbor to mount a grinding wheel, this Tip may be of interest to you. Illustration six shows an arbor you can easily make. It is a common socket head cap screw, which has had a portion of its length turned in a lathe to the desired size. Choose a cap screw which will be the correct size to mount a wire brush or small grinding wheel. The screw can then be reduced to 1/4," so it will fit easily into a 1/4" hand drill. This arbor can be used on some key machines, which have a 1/4" hole in the end of the cutter shaft, to mount a wire brush or grinding wheel. If you don't have a lathe, just chuck the screw up, in your drill press, to turn the shaft down with a large flat file. Keep the adaptor as short as possible, and only operate it at low speed.

#### Wire brush arbor from a cap screw

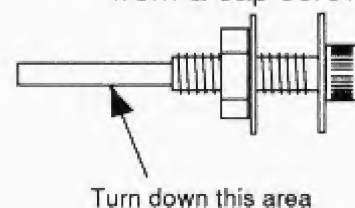


Illustration 6

Hans Garcia  
Wisconsin

\*\*\*\*\*

## New Books:

High Security Safes  
Guide to Safe Drilling  
Picking &  
Impressioning

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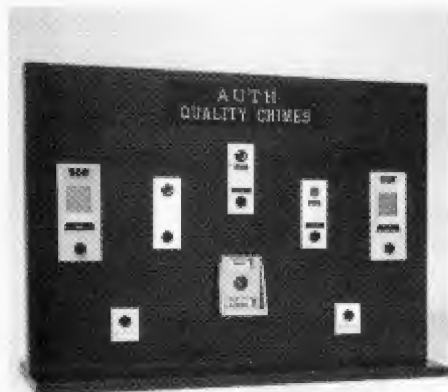
# Newsmakers

## New Products and Industry News

### Auth Chimes Expands Product Line

Auth Chimes has recently become an independent company, concentrating entirely on non-electric door chimes and viewers. A line of new finishes has been added including a silver buffed version of the 689 model and mirror bright gold and silver 686 models. A special bronze hotel model is also newly available.

The company offers a "life of the building" guarantee and is now emphasizing customer service which includes custom powder coating finishes, color coordinated nameplates and same day shipments from a complete inventory of finished goods and replacement parts.



Circle 334 on Rapid Reply

### Meilink Introduces New Line of Safes

Meilink Industries, Inc. announced a redesigned line of premium vaults and safes for home and office use. The total line features 10 models in various sizes and requirements.

The fire resistive home vaults include two models in floor and wall configuration, and a money vault which can also utilize legal size files. In addition, the new product line includes three sizes of fire resistive home floor safes: the FS-2MK at .7 cubic ft.; the FS-3MK at 1.5 cubic ft. and the FS-4MK at 2.0 cubic ft. All of the safes and vaults are in a pebble-finish charcoal gray color with chrome trim.



Circle 335 on Rapid Reply

### Dilloware's New Accounting Program

Dilloware, Inc. is pleased to announce the release of their newest product. The Billing Clerk with Accounts Receivable™. Directed towards the small business owner, who is often a computer novice and has little accounting knowledge, this software is very "user friendly." Although easy to use and reasonably priced, the program is a full featured package, versatile and designed to run either on today's more powerful computers or the older models.

The Billing Clerk has features that the locksmith needs such as invoices for large jobs and sales, or post work orders directly to customer's accounts.



Circle 336 on Rapid Reply

Continued on page 21



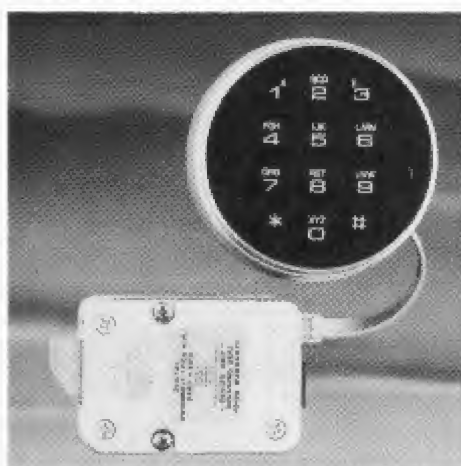
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## Digital Combination Lock From La Gard

La Gard Inc. has announced the introduction of a new digital lock system specifically designed to be used on safes. An external alpha-numeric tactile entry unit, which also holds two standard 9 volt batteries, is used in conjunction with a revolutionary "Swingbolt" lock. This lock, conforming to standard mounting and case dimensions for combination locks, has a bolt that swings back when a proper combination has been entered and the safe handle turned.



Returning the safe handle to the locked position locks the safe and provides a true autoscramble condition.

The electronics (located inside the case of the swingbolt lock) allow a true one million combinations, which can be user changed from the key pad. Connection between lock and entry module is via a telephone type connector.

The locks have been tested by Underwriter's Laboratories Inc. and granted a Group II listing.

**Circle 337 on Rapid Reply**

## Jo-Van Distributors Adds 800 Service

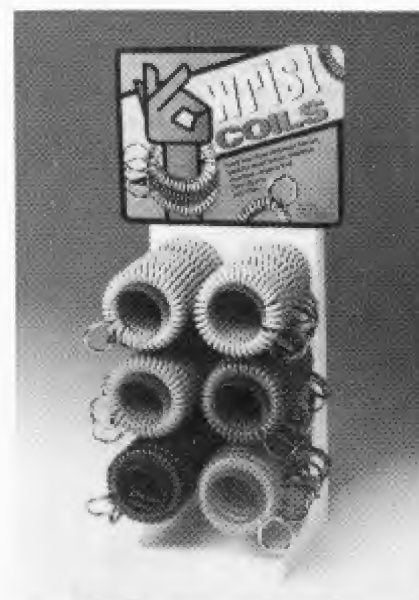
Jo-Van Distributors is pleased to announce another communication innovation to assist in serving their out of province customers.

Effective June 1st (800) 268-5731 will serve Canada from coast to coast. This service will allow faster and easier accessibility to Jo-Van's ever increasing product lines.

**Circle 338 on Rapid Reply**

## Neon Wrist Coil Display by Lucky Line

Dazzle your customers with an eye-opening display from Lucky Line. Ten



each of six hot colors, neon pink, neon yellow, neon green, neon orange, translucent blue and translucent red of the top selling wrist coil one included with the display. It will brighten your counter and is a compact 6" x 6" x 13". It includes neon header.

The Wrist Coil is ideal for cashiers, tellers, checkers, joggers, swimmers and sports activities.

Individual colors are available in refills, 10/polybag.

**Circle 339 on Rapid Reply**



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## Detex Offers Packaged Access Control System

In order to promote the sales of its Dentco III access control system, Detex Corporation has designed special packaging to present the product as an "off the shelf" package.



According to Detex Marketing Director, Robert R. MacDonald, "The Dentco III is being offered as a package to make it more convenient for locksmiths to purchase the system. Also, the kits work well as a point of purchase display, for the locksmith with an office showroom or counter space for sales promotion to the visiting customer."

Dentco III kits consist of special die-cut packaging for the access control unit, a transformer and cards for the card access system. Or a door unit and transformer for the keypad system. The kits are also available for flush or surface mount units. Simple to use, Detex packaged access control systems are complete, except for the strike or locking mechanism and its power supply.

Circle 340 on Rapid Reply

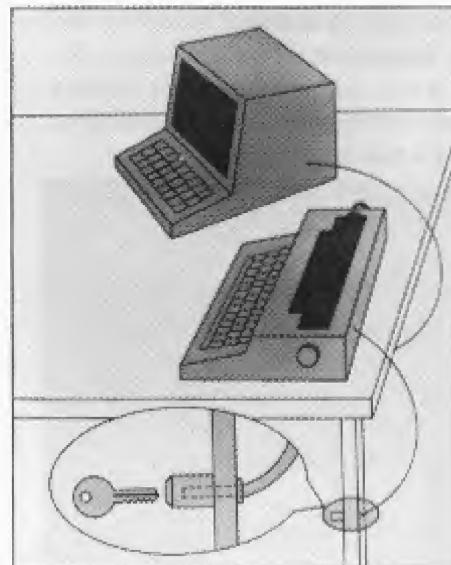
## Maxton Introduces Movable Lock System

Maxton Lock Company, Inc. introduces the Maxton Cable Lock, a security device that guards against theft of office machines and small computers, yet allows the equipment to move freely.

The new Model M1C secures equipment with a 5-foot, vinyl-covered aircraft cable and pick-resistant, free spinning lock. Both the cable and lock attach to a desk or table leg to avoid drilling on work surfaces. Unlike stationary locks, the Maxton Cable Lock allows machines to be easily

moved, yet provides maximum security.

"Incredibly, less than one percent of all office machines in this country are protected against theft," notes president Anthony Bennett. "Dealers can do customers a favor by providing a low-cost item that protects their investment."



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## Continental Instruments' Multi-Product Catalog

Continental Instruments Corp. has published a completely revised multi-product catalog. The new 8-page full-color catalog provides security professionals with a condensed description of each of Continental's wide range of systems, including the CardAccess® and Cypher® Lock.



Circle 342 on Rapid Reply

## Security Door Controls' HiTower Retrofit

A new HiTower® electro-mechanical lock, specifically designed to retrofit older high-rise buildings required by code to have two-way, safe exit stairtower doors, was introduced by Security Door Controls. Designated the SDC Model R7550, the lock incorporates the same design features of the SDC Model Z7500 Series HiTower lock, including electric remote locking and unlocking or mechanical key control, and mechanical knob or lever operation.

"Since high-rise buildings must meet current state and local life safety codes, we've designed a product that allows retrofit to earlier HiTower preps, as well as mortise lock brands with only a slight modification to the existing door prep," said Arthur Gering, president. "Because retrofitting can be very costly and time consuming, we've made the R7550 easy to install because the electronic controller is in the frame. This also preserves the integrity of the original architectural design."

Circle 343 on Rapid Reply

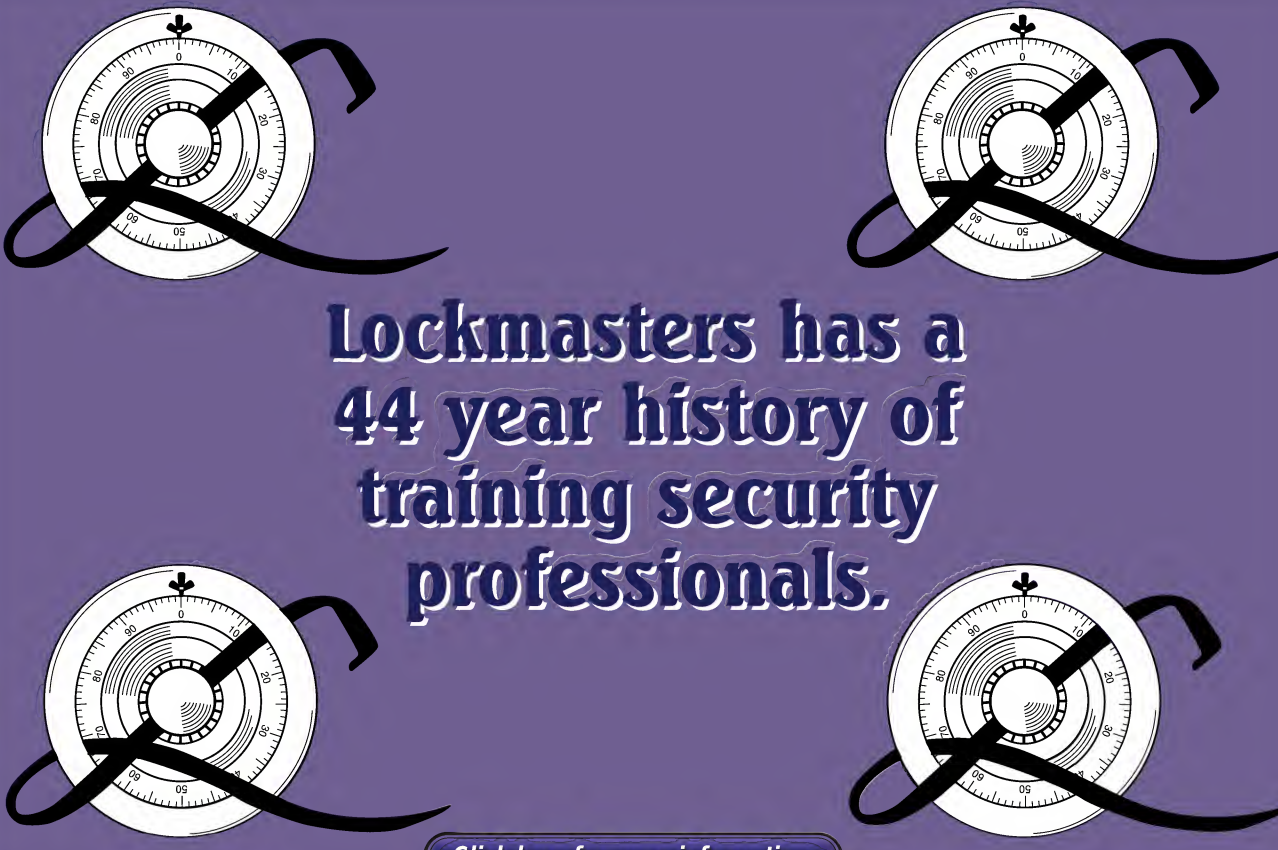
## Peterzell Company's Flexible Baton

The Flexible Baton is a low cost way to prevent personal attacks. With just a flick of the wrist, a drop of the hand, or a swing of the arm, this Baton is extended instantly from its 6" compacted state into its full 16" length. The two outer segments are spring loaded causing the action to "wrap around" its target. It absorbs more shock on impact. Its sting can daze an attacker long enough to get away fast and unharmed.

It's also a good way to keep an attacker at a safe distance. With practice, one can learn to deflect a knife attack or even a severe manual strike or swing. It can be conveniently clipped to the pocket, belt, or may be stored in a specially designed holster. Only 10 ounces of swinging weight, the Baton is safe and a non-lethal way to ward off muggers or attackers.



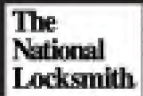
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# Perma-Vault Safes

"No matter what your circumstances, if you are not stocking and selling safes, you can get started in a small way with little space and a modest investment."



Send your lock and key questions to Jack Roberts, The National Locksmith, 1533 Burgundy Parkway, Streamwood, IL 60107.

by Jack Roberts

If the acquisition of money and valuables is the first and most important consideration for any business or individual, then keeping it should be second in importance. In today's crime ridden society, robberies and burglaries, in daylight and darkness, occur with alarming frequency.

Crime is not something new to today's generation. It has always been with us and is the foundation upon which our own business of locksmithing was founded. Without crime, or the threat of it, all of us would be out of business and trying to develop a new use for a key machine. Protection of assets, whether it be in the home or in business, is the purpose of a locksmith operation.

In my travels and visits with locksmiths across the country I find that while many of us come on strong in the lock and security system part of the business we are very lax in offering "static-storage" solutions to fit customers' needs. The term "static-storage" meaning a repository for cash and other valuables for short term or long term protection.

There are many reasons given when I ask the question, "Why don't you display and sell safes?" But the two most common excuses I hear are, "it takes too much space," and "it costs too much money." Certainly I can't argue the fact that most locksmith stores are already crowded for space, and that most of us are not in a position to lay out a considerable amount of cash for a large display of safes and/or vaults. Think back, however, to your early days in the business and how you had perhaps a small carousel of key blanks and one key machine. Short on space and short on cash! Today you may have a wall full of blanks and a half of dozen key machines and still be in the same short situation.

No matter what your present circumstances, if you are not stocking and selling safes you can get started in a small way with very little space and a modest initial investment with Perma-Vault from Bonafide Factory Products. (See photograph 1.)

Initially designed as an interim storage container for cash, checks, and receipts at cash register locations, which, of course, is a large market unto itself, the versatility of the Perma-Vault is such that it can be adapted to almost any need for safe storage.

Requiring as little as 6" x 6" of counter space, the Perma-Vault will stand ready to inform your customers that you



1. The Perma-Vault Safe. Notice cash slot.

do indeed sell vault protection. Although small, it is eye catching and is a good starter for your sales pitch. From this small unit you can determine your customers needs, (this may be all they need) and go from there. From this small beginning your safe sales can grow!

Available in two types, PRO (interim cash protection); PV (safety deposit box), and four sizes; the Perma-Vault can meet almost any requirement for interim cash protection as mentioned above but can also serve as a safety deposit box in

Continued on page 26

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Continued from page 24

homes, hotel rooms, autos, RV's, hospitals, college dorms, boats or wherever the necessity may arise.

The four sizes of the containers of both types, interim cash protection and safety deposit, are the same with lid or door being the identifying difference:

PV-100s and PRO-50AF 6" x 6" x 7 1/2"

PV-100 and PRO-30AF 6" x 6" x 11 1/2"

PV-300 and PRO-70AF 10" x 8" x 11 1/2"

PV-400 and PRO-75AF 10" x 8" x 14 1/2"

The PRO (interim cash protection) models have a cash slot cut into the lid, (see photograph 1), for easy drop of cash or checks while the PV (safety deposit) models have a solid lid. (See photograph 2.) All Perma-Vault bodies are made of heavy 12 gauge steel and are finished in baked and stippled black enamel although other colors are available on request. The patented slide-off lids are chrome and nickel plated steel, fitted with Medeco cam locks and are interchangeable with all models within a size group.

Each Perma-Vault body has four 7/16" holes drilled in the bottom and the back for easy installation on any structurally firm foundation. Mounting screws, nuts, bolts, lag screws, toggle bolts, concrete



2 PV safety deposit vault with solid lid.

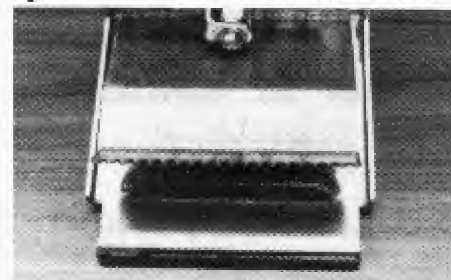
expansion fasteners, etc., are not furnished with the Perma-Vault.

The construction of the Perma-Vault body and the patented slide-off lid (top) would appear to make entry by physical attack extremely difficult by any means short of drilling. We took a unit to a welding shop for an evaluation of the continuous seam and spot welds and their rating of the work was excellent.

The anti-fish baffle (see photograph 3), of the PRO (Interim cash protection) models deters removal of the contents by

the "fish" method although we were able to extract a few loose bills with a special tool that most thieves would not be carrying.

All PRO models and the two small size PV models are available with two Medeco locks for additional security. Locks for all models may be ordered keyed alike, keyed different, and master keyed. Removeable core locks are also an optional order and, of course, all models



3. The "anti-fish" baffle.

can be retrofit with the type of lock desired by the customer or the locksmith. Bonafide Factory Products maintains the code numbers of all locks installed at the factory and additional keys may be ordered by the locksmith or the end user.

Light enough to be carried into a home, business or institutional facility from the service vehicle (the two models shown in this review weigh about 12

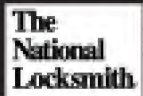
Continued on page 28

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Continued from page 26

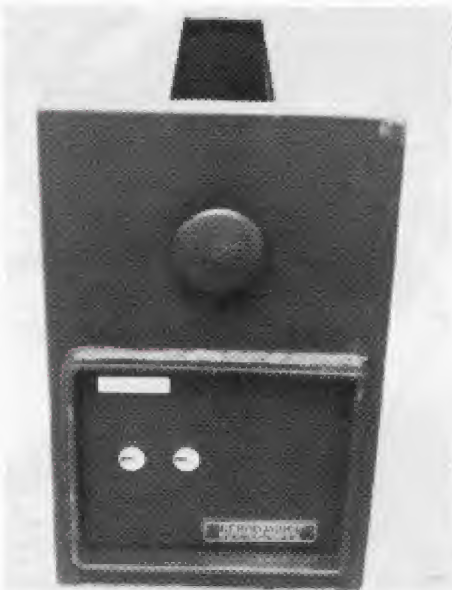
pounds each), the sales potential for the Perma-Vault is limited only by the imagination and the efforts of the locksmith who is interested in a few more dollars added to the cash flow chart.

Since the lids are interchangeable within model groups, lids are available as a separate item so that a supervisor may carry an extra lid or two for quick change at a location where it is deemed advisable. This gives the aggressive locksmith another opportunity to make additional sales. For the protection of cashiers or others at or near cash register locations, Perma-Vault provides a notice that the attendant does not have the keys to the locked vault. (See photograph 4.)

An additional product from Bonafide which can be added to the safe line is the Rotary Hopper Depository Safe. (See photograph 5.) Designated as Model PV-814-K this unit measures 8" x 11 1/2" x 13" and weighs in at 35 pounds. The rotary hopper and the anti-fish device makes fishing of the contents virtually impossible and the heavy 12 gauge steel construction deters physical attack. The area surrounding the 5-1/2" x 6-1/2" x 3/8" steel door is heavily reinforced to provide maximum protection. The unique design of the hidden or invisible hinge enables the entire hinge side of the door to be deadlocked behind the door



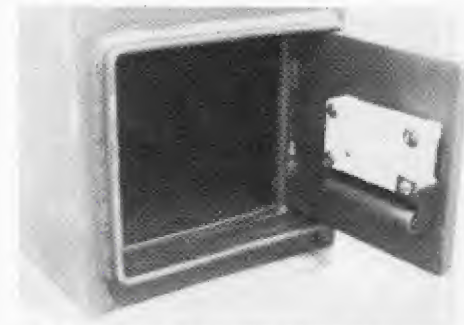
4. Notice to consumers or potential thieves.



5. Rotary Hopper Depository safe.

framing.

The suffix K in the model number indicates that this model is equipped with an S&G 4440 safety deposit box lock. (See photograph 6.) If a combination type lock is desired the suffix "C" is added to the model number thus, PV-814-C. The 814 provides quick drop interim storage for larger quantities of bills and coin rolls and of course may also be labeled that the attendant does not have the keys or the combination.



6. This model has an S&G 4440 lock.

We find the Perma-Vault to be a well built quality product which provides low cost, limited space, entry level access to future safe sales for the locksmith.

For more information contact: Bonafide Factory Products, P.O. Box 473, Huntingdon Valley, PA 19006, (215) 364-0330. §

# NATIONAL

## AUTO LOCK SERVICE, INC.

**National Auto Lock Service, Inc. offers a wide range of equipment and services for the Automotive Locksmith. From tools and hard to find key blanks to transponder programming, we can take the mystery out of car service. We accept credit card orders, and can ship COD. Contact us for the latest in automotive technology.**

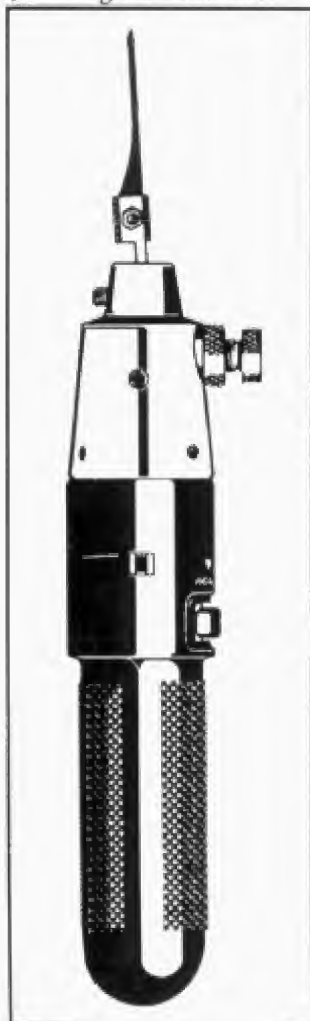


# HPC Locksmith Tools

"The company has been manufacturing a wide variety of tools and locksmith supplies designed to make your job easier."

**F**or thirty-five years, HPC, Inc. has been manufacturing tools and locksmith supplies designed to make locksmithing more convenient and easier. Let's take a look at some of the innovative products released by the company, and available through authorized HPC distributors.

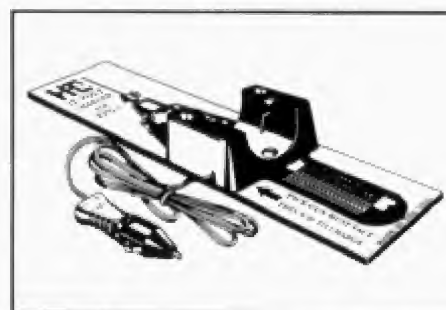
The Electropick™ (EPG-1) is a cordless rechargeable electric pick gun. It allows the locksmith to duplicate his exact raking motion at many times per second. The gun rakes open pin and disc tumbler cylinders using a rapid up and down striking movement, which causes the top and bottom pins to separate, meeting the shear line.



1. The Electropick.™

The up and down motion is adjustable by a thumbscrew with a locking nut, controlling the action after the range of motion is set. The device allows the locksmith to massage the pins into finding the shearline with pin point control of the raking motion. The Electropick™ comes complete with a charger for bench or wall mount, as well as three raking tools and two tension tools.

A variation of this tool is the Three Cell Electropick™ (EPG-13) which features a three cell rechargeable power handle, giving the unit one third more life between charges. It comes complete with a built-in signal light to show when the unit is charging.



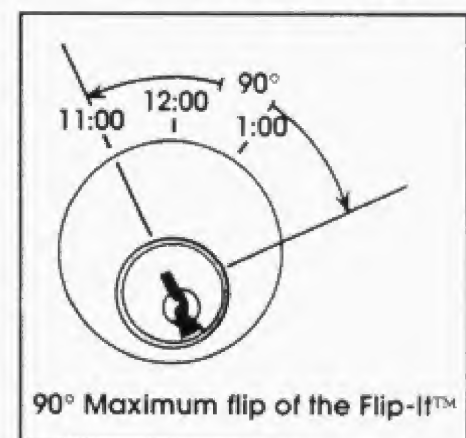
2. The new 12 volt charger which allows the pick to be recharged in locksmiths' mobile vans.

Another new tool from HPC is useful when picking a lock in the wrong direction, either intentionally or by error. The new Flip-It™ will flip the cylinder past the upper pins and save you the job of re-picking the lock.

The tool comes with two special features. The two pin quick lock/release feature allows for easy release of the rotation action. The sure stop feature prevents over-winding in either direction.

Let's take the case of a cylinder mistakenly picked to the left. To flip the plug of this cylinder to the right, turn the plug slowly to the right, stopping at the 11 o'clock position. (See illustration 3.) Be careful that you don't relock the plug. The plug must be set at 11 o'clock

when flipping to the right, or 1 o'clock when flipping to the left to avoid

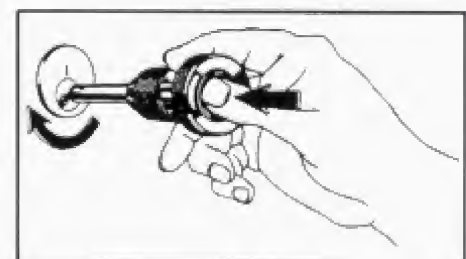


3. Plug is set at 11 o'clock.

relocking while using the tool.

For the plug picked to the left, preload the tool by turning the chrome knob to the right. While turning the chrome knob, apply slight pressure toward the front of the unit.

Insert the tip of the Flip-It™ into the keyway, holding it steady, and push the black button in with your thumb. Do not hold onto the knurled section as it is



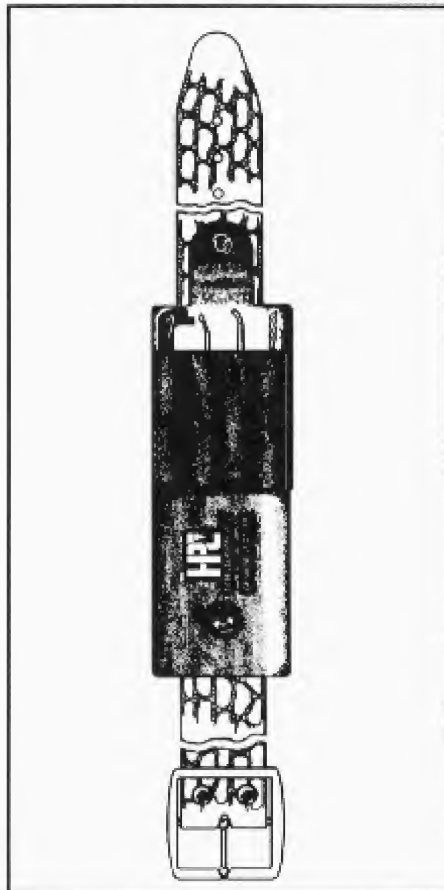
4. Push the button to flip open the lock.

a spinning part. (See illustration 4.)

The KGB-1 is a new pick set which fits directly on your belt and can be worn anywhere. It comes equipped with six brand new tools: three picks, one broken key extractor, and two different tension tools. The overall length of each tool is only three inches. All of the tools lie flat in the leather crafted case. The case itself is only 3-1/2 inches long by 2-1/4 inches wide. These dimensions



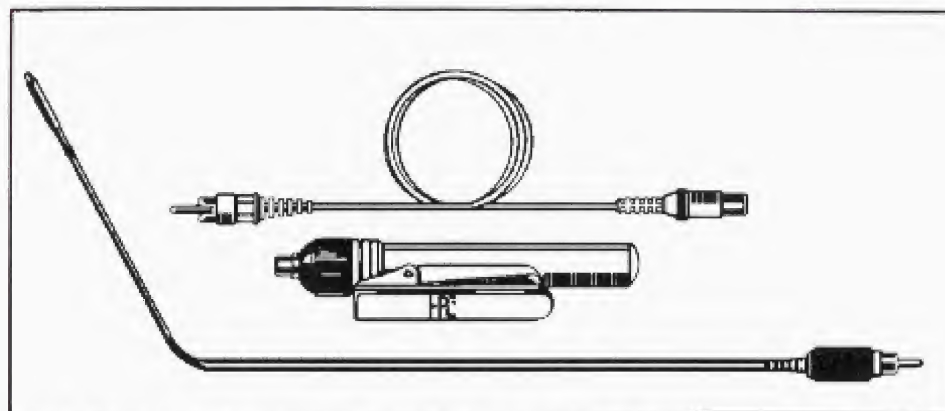
allow the pick set to be worn very



5. The KGB-1 pick set is designed to be worn on a belt.

discreetly.

Another addition to the HPC line has been the Flex-A-Light™ probe lights.



6. The Flex-A-Light flashlights offer high visibility lighting for many locksmith tasks.

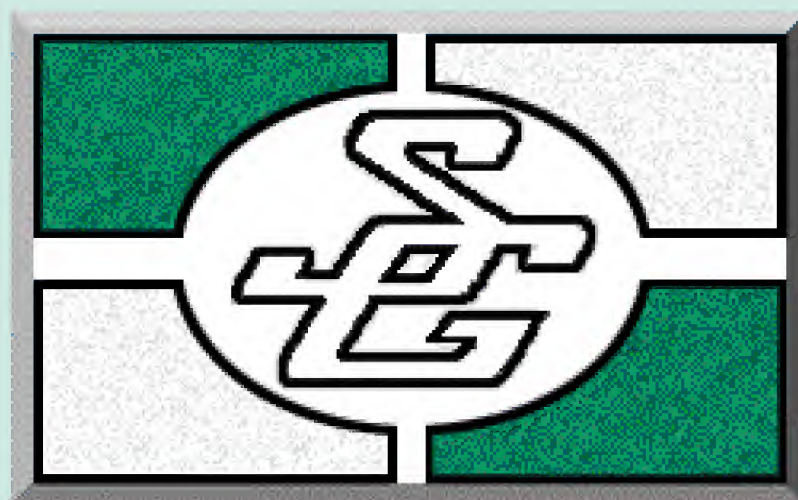
These unique flashlights are more flexible than regular bending lights, yet they are rigid enough to keep in the desired position. The lights are quite useful for car opening and other jobs. Halogen light bulbs cast high intensity light. There are no switches to fail, and 36" extension lights are available for lighting in extremely hard to reach areas. Plus, the power handle can clip right to your pocket or belt. The interchangeable lights each feature a jack on the end which plug right into

the power handle. Thus, you can choose the right light for the particular job which you are doing. Replacement

bulbs are available.

HPC also offers a portable, hand held tubular key machine. The Pocket Cut-Up™ (TKM-90) is extremely small making it quite portable. It is able to cut by code standard size center, left of center, right of center, 8-pin and guarded Greenwald tubular keys.

The cutter is a special design made of carbide for quick and clean cutting of brass or steel blanks. The machine comes with a positive locking micrometer depth adjustment. The unit

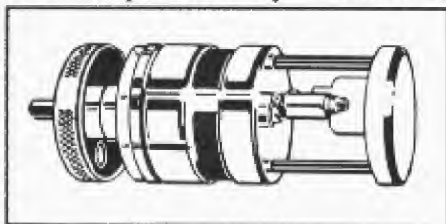


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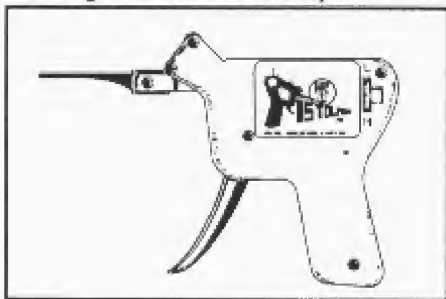
is powered without electricity, by turning the hand crank. However, for cutting a large number of keys, the unit can be powered by a cordless



**7. The Pocket Cut-Up™** Portable tubular key machine.

screwdriver.

Other tools in the manufacturer's line include an extensive array of picking tools and sets. Among these is the Pistolpick™ (HPG-10). This tool will pick pin and disc tumbler locks with ease. All parts, including the main housing, are black nickel plated cold

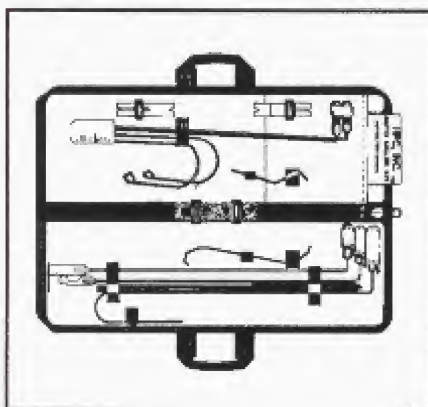


**8. The Pistolpick™** makes picking easier.

rolled steel for protection against rust.

The unit comes complete with picks and a tension tool. An optional black leather case is also available. All moving parts are replaceable and are stocked by HPC.

Along with lock picks, the company also manufactures a wide variety of car opening tools. Among them are many sets, including the Auto Killer Kit™ (AKK-15). This tool kit features fifteen tools, including car openers, wedges,



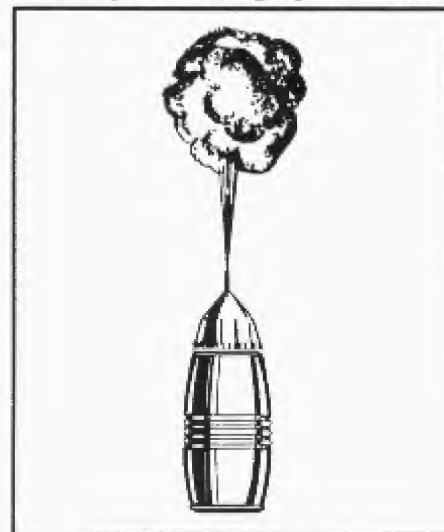
**9. The Auto Killer Kit.**

picks, and more.

The highly durable black case is optional. There is extra room in the case for more picks, supplies and tools. A clearly illustrated, comprehensive car

opening manual is included.

HPC has long manufactured their popular Graphite Gun, which is refillable, leak proof and clog proof. Use it prior to picking or impressioning to loosen tight wafers and pins. It is perfect for lubricating key machine carriage shafts and wing nut studs. Graphite will not attract dust or chips. Bulk replacement graphite is also



**10. HPC's Graphite Gun.**

available.

For more information contact an authorized HPC distributor. §

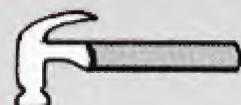


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# Tool

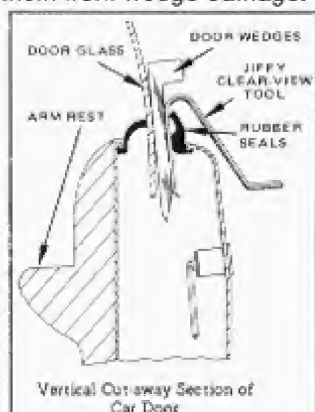
# Review

If there is one thing that locksmiths really love it is their tools. There is a tool for every purpose under heaven. Some are clever and nice to have. While others are truly indispensable. In this product review section we present you with a variety of the tools manufactured to meet the needs of the locksmith. Feel free to use the Rapid Reply card to request information on any interesting product you may see here.

## AAA Products New Car Door Tool

The Jiffy Clear-View tool is a metal channel which can be inserted between the rubber car window seal and the glass when opening a car door lock. When inserted with standard 3/8" thick wedges the locksmith has a 3/8" by 4" opening for inserting a light and using opening tools.

This tool holds the rubber glass seals out of the way while protecting them from wedge damage.



Circle 314 on Rapid Reply

## Aable Locksmiths G.M. Persuader

Frank Markisello RL of Aable Locksmiths has designed a new tool that will open virtually all GM door and trunk locks in less than 60 seconds. This tool was originally designed to open those trunks where the spring retaining cap has popped up into the outer shell, making it impossible to open the lock with the key, or the key is worn out. With this tool and the key you can open the trunk without any damage, then just replace the retaining cap and the face cap.



Circle 315 on Rapid Reply

## Adapt-A-Bore Kit

The Adapt-A-Bore™ lock installation kit will help you to quickly install all manufacturers' deadbolts requiring a 1-1/2" Crossbore.

No longer will you need a flimsy, paper template for the popular Schlage and Medeco heavy duty deadbolts you so often install.

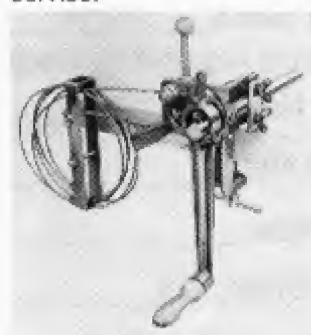
An economical alternative to multiple installation devices, Adapt-A-Bore™ will easily retrofit to your Kwikset installation "jig" or is available as a complete, ready-to-use, installation kit.

Circle 316 on Rapid Reply

## Advance Car's Spring Winder

The porter spring winder from Advance Car Mover Co., Inc. makes extension and compression springs up to 1-1/4" diameter and wire up to 3/16" diameter.

The hook-on spring looping tool forms perfect loops and hooks on springs up to 1/2" OD. Other accessories include cut-off nipper for hard wire and packaged music wire up to 3/16" diameter. The porter spring winder requires no experience or skill to operate and it is built for years of dependable service.



Circle 317 on Rapid Reply



Continued from page 36

### American Tools' Locking Pliers

Innovative bent nose locking pliers have been engineered by American Tool Companies, Inc., maker of Vise-Grip® locking pliers and clamps. Traditional bent nose pliers have been around for years, but now tool users have the additional benefit of solid locking action that has always been associated with Vise-Grip locking tools. There's keen interest in this product and one can expect similar enthusiasm from the D.I.Y.ers as awareness of the new tool grows.



Circle 318 on Rapid Reply

### Gil-Ray Offers Cutter Sharpening

Gil-Ray Tools Inc. offers a mail order sharpening service for dull key machine cutter wheels. Established in 1945, Gil-Ray Tools sharpens and repairs all types of dull machine cutters including: code cutters, duplicating cutters, slotters, and file cutters. They sharpen all materials including high speed steel, tool steel and carbide.

All dull wheels are restored to blueprint specifications and can be resharpened many times.



Circle 319 on Rapid Reply

### Electropick By HPC, Inc.

The all new HPC Electropick™ (EPG-13) is made with a three cell rechargeable power handle which gives the unit 1/3 more usable life between charges.

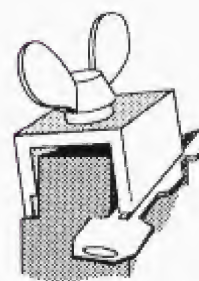
It comes complete with a built-in light, to signal that the unit is charging. Now you have a choice between the original Electropick™ (EPG-1) and the new EPG-13.



Circle 320 on Rapid Reply

### J & B Key-Rite's Machine Vise Jaws

Specially designed for the Belsaw 200 key machine the reversible steel cap key machine vise jaws install in less than two minutes with no alteration to the machine needed. They help to hold all keys more rigid while cutting and the reversed cap shifts the holding power of the clamp to the front edge for a more rigid and clamping key.



Circle 321 on Rapid Reply

### Jensen's Security Hex Bit Sets

A variety of 1/4" security-type hex drive bit sets are now available from Jensen Tools for servicing equipment protected by manufacturer installed security screws. The sets available include a four-piece set of spanner bits; four-piece tri-wing security bit set; two-piece T-5 torx bit set for Compaq laptop computers; and a complete 10-piece security hex bit set for access to a wide variety of electronic equipment. All are 2" long security type bits for use manually or with cordless tools.



Circle 322 on Rapid Reply

### Kaddie Inc.'s Tool Kaddie

The Tool Kaddie from Kaddies, Inc. is a unique dolly style, plastic tool and parts organizer, which allows you to store, lock and roll your tools and parts to the job in one trip.

The Tool Kaddie is made of durable, double wall molded plastic, and is a time and money saver, eliminating endless trips back and forth for tools and parts. It provides an organized and professional appearance as well as a safe, lockable storage for tools, while on and off the job.



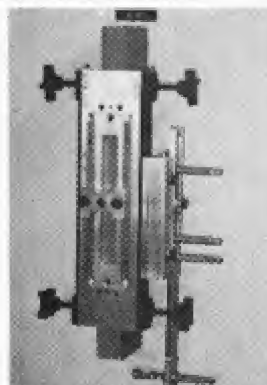
Circle 323 on Rapid Reply

### Keefe 800 Fixture Installation Kits

This fixture from Keefe Mfg. Co. can be set up to install almost any lock on the market today. The 800 fixture is used mostly to install mortise locks.

The photo shown here demonstrates the 800 fixture set to install a Baldwin mortise lock with a pitcher handle. The 800 fixture can also be used to install both corner mount and extension flush bolts.

With the 800 fixture the only tools you will need are a drill and a router.



Circle 324 on Rapid Reply

### Kett Tool's Metal Cutter

Kett's KS-25AM Heavy-Duty Metal Cutting Saw cuts mild steel up to 16 gauge, hard tempered aluminum up to 1/8", and soft tempered aluminum, brass, copper and lead up to 3/16".

Versatile, durable and dependable, the KS-25AM comes equipped with a retractable spring loaded blade guard which automatically springs back in place as the cut is finished, that means you can make plunge cuts with accuracy and with safety.



Continued from page 40

### Labor Saving Devices' Organizer

The Bucket Bag™ from Labor Saving Devices is ideal for locksmiths to use to organize their tools and carry them with on the job.

Sewn with heavy duty 10 ounce canvas, The Bucket Bag™ features pockets inside and out, fits most five gallon buckets, is completely portable and offers easy access to all tools and accessories.



Circle 328 on Rapid Reply

### Leading Edge's New Tools

With drill attachments that facilitate drilling with only 2" of clearance. Leading Edge Tool company specializes in "close quarters tools."

If half the job is getting there, reach for our new catalog.



Circle 329 on Rapid Reply

### O-Mega's New Star Warrior™

The Star Warrior™ from O-Mega Stun Guns is made from 21st century futuristic design and technology, and is considered the most awesome, frightening and intimidating stun gun currently on the market.

The total electrified shaft with visible electric arcs running up and down the shaft, has an increased power of 150,000 volts.

The 18" Star Warrior™ has a rubberized finger-grip handle, contains two batteries and dual coil, and any touch with the shaft's parts is effective.

### RatchKey Changes Bits Easily

RatchKey™ makes bit changeovers easy. Simply insert RatchKey into the chuck and turn. The handle provides the mechanical advantage needed to break the toughest chuck hold while the ratchet action lets you loosen or tighten without changing your grip.

Where changeovers are frequent, RatchKey not only makes the job easier, but also is a significant time saver.

Ratchkey fits the new 3/8" standard chuck used on all cordless 3/8" drills.



Circle 331 on Rapid Reply

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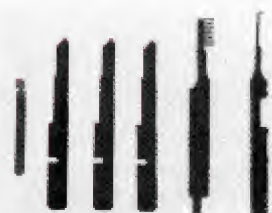


Continued from page 42

## R & D's New Pick Sets

GM and Ford sidebar locks are considered to be the most pick resistant car locks.

Through research and design testing, R & D Tool Company developed a set of precision tools which simplify the picking and decoding of GM locks and picking Ford locks.



Circle 332 on Rapid Reply

## Slide Lock's Master "Z"

The new '92 "Master" Z-tool Set® is the complete automotive lock-out system detailing all lockouts right up to the newest showroom models.

The set's patented versatility requires only three working tools (Z-Tool®, AutoBuster Tool™ and the new Japanese tool™). All opening methods are guided by the recently released '92 4th edition manual illustrated in four step format showing all door cavity lock-system mechanisms in two color detail for easy step-by-step openings.

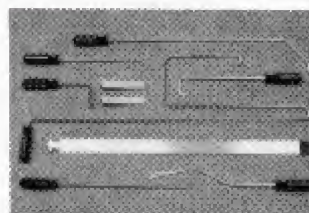


Circle 333 on Rapid Reply

## Steck Lockout Tools Kit

The Steck Lockout Tools Kit has been developed over the past 25 years and now includes the Slide Lock Tool that actually reaches under the window glass to the inside of the car to actuate the lock button on the inside door panel. This tool is essential on a number of newer cars that have no exposed linkage in the door cavity.

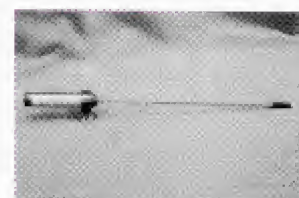
The Slide Lock Tool is useful on many other cars because you can see the tool work instead of working blind.



Circle 201 on Rapid Reply

## AAA Products' Halogen Probe

The jiffy Halogen wide angle super probe light from AAA Products International is ideal for viewing in restricted areas, specifically for locksmith's for viewing inside car doors, safes or similar places. It brilliantly lights up the entire interior, with no troublesome switch.



Circle 202 on Rapid Reply

## Advance Car's Hook-Kon

The Hook-Kon spring looping tool from Advance Car Mover Company Inc. can form perfect loops and hooks on the ends of coiled wire springs made from wire sizes up to .62", with outside diameters of 1/8" to 1/2".

The Hook-Kin allows a special spring to be made by forming required loops or hooks on the ends of a spring-made on a lathe, a hand-spring winder or a cut from a stock length extension spring.

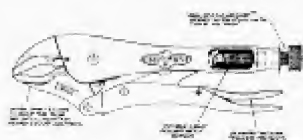


Circle 203 on Rapid Reply

## American Tool's Quick-Adjust™

The new Quick-Adjust™ speed screw from American Tool Companies, Inc. makes adjusting tools twice as fast. This new screw and thread design allows users to adjust each tool's locking action twice as fast as before.

Speed is an important feature to all tool users, especially for industrial, automotive, and other professionals. The new screw design requires exactly one half the turns to adjust the jaw opening, with no loss of smoothness or adjusting precision, and is now featured on all but their 4-inch tools. The guarded release trigger prevents accidental unlocking.



Circle 204 on Rapid Reply

## HPC's Pocket Cut-Up™

HPC Inc.'s Pocket Cut-Up™ TKM-90, is a compact, light and portable key machine that when closed measures less than 4" in length and only 1-3/4" in diameter.

The key machine is factory preset to cut standard size center sequence tubular keys by code and offset left sequence and right sequence (including dead pin cuts) can be cut with one simple adjustment. Greenwald style tubular keys can also be cut.

The tubular key blank is held firmly in place by the swing-away key holding fixture and also locks the micrometer depth adjustment knob at any pre-selected depth.



Circle 205 on Rapid Reply

## O-Mega's New Secret Agent™

O-Mega Stun Guns' Secret Agent™ is 5" long and has an increased power of 80,000 volts.

The Secret Agent has a comfortable rounded handgrip, a recessed trigger and a beautiful symmetrical shape.

It easily fits in a purse or pocket, and its extremely loud electrical sound is an effective deterrent.



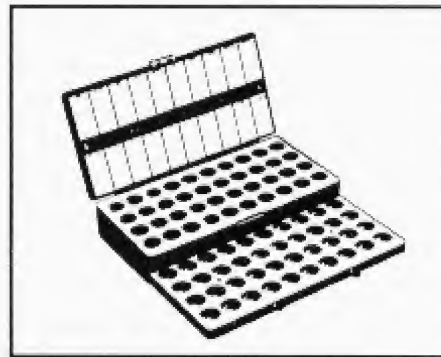
## Products From ESP

"In this article we will take a closer look at some of the locksmith tools manufactured by ESP. They range from pin kits to hand tools and more."

**M**anufacturing locksmith tools for a wide variety of jobs is ESP Corp. The latest catalog features a spectrum of hand tools, drill bits, lock picks and specialty items designed to make jobs for locksmiths easier.

In this article, we will take a closer look at some of the locksmith tools available through ESP distributors. The Kolor Koded Pin Kit Assortment (KK-80) is an anti-spill pin kit with extra deep compartments that hold over a gross of pins with additional room still available.

The kit is loaded with 40 different color coded bottom pin sizes and 39 various color coded top and master pin sizes, as well as springs. The handy reference chart clearly indicates what



1. The Kolor Koded Pin Kit

pin sizes are used by various lock manufacturers.

A heavy duty laminated wood case with a formica top features drawers, and is very durable. The case is available without the pins also.

However, ESP does offer a complete range of brass Kolor Koded rekeying cylinder pins, precisely engineered. All pins, .115 in diameter, are color coded red, gold, green, purple and silver, every five thousandths in length.

The master and top pins feature absolute flat ends, while bottom pins have the precision radius required for trouble free rekeying. All pins are guaranteed to be burr free and feature beveled edges for proper seating in the cylinder. Pins are packaged in one gross bags.

Another interesting tool offered by the manufacturer is their Decoding & Spacing Gauges. (See illustration 3.) The locksmith can decode and check

*Continued on page 48*



**SCHWAB CORP.**

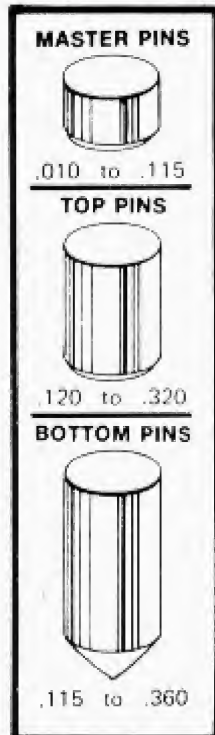
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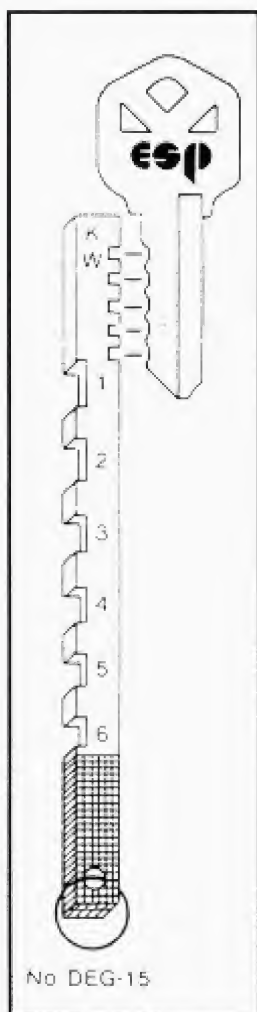


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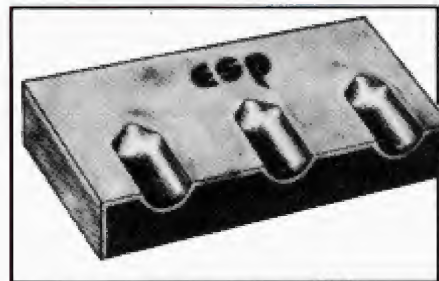


2. Precision pins.

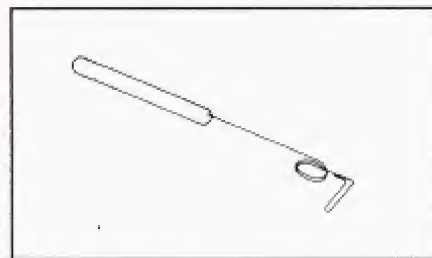
spacings with this one tool. Available styles are made for popular cylinder as



3. Decoding & Spacing Gauge.



4. Tubular Key Stamping Block.



5. Adjustable Turning Wrench.

well as domestic and foreign autos keys. Decoding the key is simple, lay the cut key into the appropriate numbered slot for a snug fit. Then place the key shoulder stop against the tip of the gauge and you can check the spacing accuracy of the cuts.

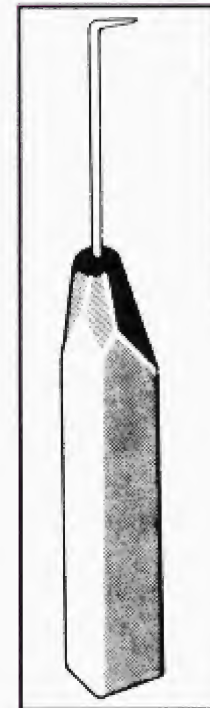
The gauges are ideal for use during impressioning and are also useful for checking the space and depth accuracy of your duplicator or code machine.

ESP's Tubular Key Stamping Block (TSB-3) is designed to help make the job of stamping the head of a tubular key much easier and safer. Made of hardened steel, the block is designed with hollowed out chambers in which the barrel of the tubular key rests. The head of the key lies on the flat steel surface, providing a solid base for stamping.

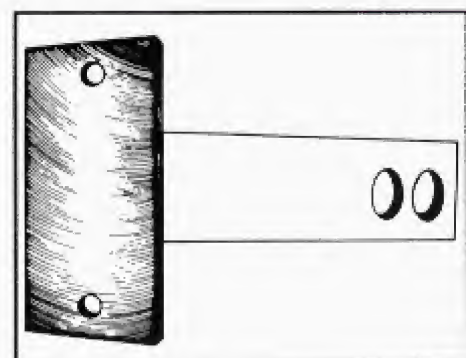
A unique tension wrench for lock picking is the Adjustable Turning Wrench (ATW-1). It has long been known that variable turning pressure is necessary when picking. This tension wrench provides the variation automatically because the coiled spring head applies pressure from a fraction of an ounce up to four ounces of pressure. This device helps to open the harder locks.

A tool with hundreds of different uses is the CJ-34 Multi-Tool. It is useful for pulling small springs, especially on mortise locks or knob tension springs on Schlage K locks, or any lock where there is limited room to use pliers or your fingers.

This dental type probe is also used to take off tru-arc rings, and it is a tremendous aid in taking the caps off key-in-knob cylinders and rim cylinders



6. The Multi-Tool.



7. Korect-A-Bore.

such as those made by Lori, Arrow, AWI, Dexter, Sargent and Schlage, among others. Other functions include depressing the pin to remove Corbin and Russwin knobs, and taking the wedge out of Schlage A80 cylinder locks.

A handy tool designed to save you time and guesswork when you have to enlarge, move or rebore a misaligned cross bore hole in a door is the Korect-A-Bore. It makes an easy job of changing the backset on a cross bore hole from 2-3/8 to 2-3/4. It also provides an easy method for enlarging a cross bore hole when you are replacing a particular manufacturer's lock with another brand where a different size cross bore hole diameter is required. The unit also aids in "truing" a hole properly so the replacement lock you install will fit perfectly.

For more information contact your distributor or: ESP Corp., 375 Harvard St., Leominster, MA 01453, (508) 537-6121. §



# The Lighter Side

Those Nasty Lock-Ins



by Sara Probasco

**H**ave you noticed how things seem to run in clusters? For example, we'd gone along for months having a long series of lockouts. Then a week came along when everybody seemed to be locking themselves into places.

First, there was a couple at a local motel. The manager called, frantic. They had been banging on the door and the walls for nearly an hour, trying to attract someone's attention. When another motel guest finally reported the noise, the manager had gone to identify the problem, but he had been unable to open the door, either.

**Responding to the call,** Don discovered that the bolt was binding, preventing its retraction. He had them out in short order, only a little worse for wear.

Then there was a child who locked himself into his grandmother's bathroom. We handled that one over the phone, enlightening the woman to the purpose of the little hole in the outside knob of a privacy lockset.

The following weekend, Don and I worked in our yard, setting out plants and planting grass into the bare spots. You can imagine my sentiments when I glanced out the window on Monday morning and saw our dog happily digging up the azalea bushes.

**"Bear! Get out of there,"** I shouted, slamming out the back door in my bathrobe and charging across the yard toward the shaggy, black culprit. After cavorting about trying to snatch the new "plaything" from his mouth, I finally managed to rescue the shrubs and get them replanted. "Don't dig in the flowerbed again," I scolded, wagging my finger at his playful grin. Then I walked back to the house.

My hand grasped the handle of our storm door. It wouldn't open. I tugged

on it. Obviously, it had somehow locked when I slammed it behind me on my way out of the house. "Oh, great!" I could picture myself traipsing down the street in my bathrobe to the neighbor who keeps a key to our house. "Might as well get this over with," I shrugged.

**I had walked around** the end of the house to the gate before it dawned on me that the gate was locked. In fact, all four gates were padlocked. The fence was pointed, six-foot-high cedar posts creating a formidable barrier. There was no easy way I could get out of my backyard without a key. My next-door neighbor had already left for work, and no one else lived close enough to hear me, even if I hollered. Besides, all they could do to help would be to call Don, and he'd never let me hear the end of it.

Then I remembered that we had turned on the attic fan the night before. The window in my study might still be up. I ran around to that side of the house. Sure enough, the window remained open, but it was too high for me to crawl into, and I could find nothing in the yard to stand on. However, by removing the screen I managed to reach inside and pull a high-backed chair out the open window. Stepping onto it, I reached through the opening and managed to wriggle and kick my way into the house.

**Later, I made a spare** padlock key and concealed it in a place accessible to the back yard. At least it wouldn't happen again. I chose not to mention the incident to Don.

A few days later, someone else called with lock-in problems. Don had been summoned twice that night to open vehicles. The telephone rang again, shortly before nine o'clock.

"I can barely hear you," Don shouted into the receiver. "Can you speak louder? ...Where? ...Who? ...Which door? ...Can't this wait until morning? ...I see. All right, give me a minute, then, and I'll be there." He hung up the receiver and leaned forward to tie his shoes.

"What now?" I asked.

"That was Frank, calling from the opera house. Somebody's locked in one of the downstairs rooms, and they can't get out."

"Who is it?"

"One of the nuns."

I was pondering what a nun would be doing in the basement of the opera house so late at night, when Don added, "Frank said it was Mother Superior."

**"Mother Superior?** We don't have a Mother Superior in Uvalde."

"I'm sure that's what he said: 'Mother Superior is locked in the dressing room, downstairs, and we can't get her out.' He sounded pretty uptight." Don snatched the laces into a bow and stood up. "One thing I can't figure out is why he was whispering. I could hear a couple of other people talking pretty loud, in the background."

Suddenly, I remembered. "The Sound of Music!" I said.

"No. There wasn't any music. Just voices," Don replied.

"This is opening night." "I guess you could say that. This makes the third call I've had since supper."

**"No, no You don't understand.** The Uvalde Arts Council is staging The Sound of Music, and they are in the middle of the opening night performance, right now. Whoever is playing the role of Mother Superior must be locked in the dressing room. You'd better hurry. She probably has an entrance to make."

"Frank did say something about fifteen minutes. I thought he was just impatient."

Sure enough, when Don arrived on the scene, the actors on stage were drawing out their dialogue as much as they dared, their eyes darting anxiously to the wings. Most of the back stage crew were gathered in the basement, huddled around the dressing room door. In their midst, the burly scenery chairman, swathed in packing quilts, was attempting to bash his shoulder through the door as quietly as possible, in deference to the drama being enacted

*Continued on page 80*





## Spotlight On Baylis Corp.

Little did Buzz know that 16 years ago, when he started his business, his first warehouse would be a symbol of a product whose sales have helped make him a success today.

In 1974, Buzz started Baylis Corporation by selling out of the back of a Honda Civic, and it is foreign car locks, and his company's expertise in them, which has been a large part of the Baylis success story.

Automotive locks, both domestic and foreign, and Baylis have become virtually synonymous. It is hard to think of one today without thinking of the other. And, many take the ease of working with car locks as a given. But, as with most things it was not always this way.

Before Buzz there was Samuel Zeldin, who bought locks by the bucket and sold them by the piece. Buzz took this idea of selling automotive locks as a specialty and turned it into an art form. But, he also made it easier for the small locksmith, which has always been the ultimate goal of the sales policies of Baylis Corporation.

That is why Baylis continues to be one company which does not undermine the locksmith in its sales or educational programs.

Buzz eventually outgrew the Civic and in late 1975 moved into his first non-mobile warehouse in San Mateo, California, just south of San Francisco.

The company continued to grow and by January 1977 included more than 2,000 parts and was now a major part of the locksmith wholesale distribution business.

Another move came in March 1978 when Buzz took the business north to its present location in Novato, California, some 25 miles north of the Golden Gate bridge. This allowed the company much more growth in a modern warehouse about three times the size of the old one.

However, size of the space was not enough to insure a successful business and that is when Buzz came up with the idea of selling primarily through the use of direct mail flyers and toll-free telephone numbers.

This would give his company access to customers, and give customers access to his company, without having to hire several salesmen to go out on the road and call on potential customers. Baylis Corporation could now effectively compete with much larger companies which have a deeper checkbook.

In early 1979 the first of the famous Baylis flyers was taken down to the post office and released on the locksmith world and a whole new era in selling locksmith products was started.

In 1984, Buzz added the 800 numbers and now the whole nation could reach him for products as if he was just a local call away. In fact, Baylis Corporation was one of

the first, true national distributors in the lock and key business.

The company continues to expand its service to the industry. Buzz goes all over the country teaching classes in automotive locks and along with General Manager Andy Foster and his staff, the company continues to bring the latest information on everything from air bags to VATS cars to its customers.

Baylis Corporation continues to stock all the foreign and domestic car locks and lock parts available to the locksmith. If it is made for the auto lock aftermarket, Baylis has it. Only a car dealer might stock some car lock or lock part which Baylis does not stock.

In addition to the car locks and lock parts, Baylis Corporation carries a complete line of domestic (house and commercial) key blanks, automotive blanks (including all the high security keys), rubberhead key blanks, key accessories, car opening tools, picks and pick sets and pins.

Among the lines carried are Briggs & Stratton, All-Lock, Auto-Security Products, HPC, Silca, Ilco, Lab, Lucky Line, A-1, and Pro-Lock.

The future looks bright as well. In the increasingly specialized world the need for a distributor to count on is greater than ever and the industry knows it can count on Baylis Corporation. Buzz, Andy and their staff have been there to provide quality service in the past and they will be there in the future. §



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# Beginner's Corner

## Interview With Institutional Locksmiths



by Eugene Gentry

I have been interested in knowing just what an institutional or industrial locksmith does in his work. A new locksmith should be familiar with this to help him decide what part of locksmithing he should train for. One thing I learned was that the manufacturing firms that hire locksmiths are very secretive due to the fear of industrial espionage. A locksmith who is employed by a company that manufactures a product that is sold worldwide said he would talk in general terms but that I couldn't print his name, the company name or their product. He said the company did not want it known that they even hire a locksmith.

I did get a chance to interview three interesting men. The first is Bob Entis who is employed as a locksmith for the Good Samaritan Hospital, one of the larger hospitals in Phoenix. (See photograph 1.) I met him in the security



1. Good Samaritan Hospital in Phoenix.

office and he led me to his shop in the basement of the Rehabilitation building. I was impressed with his shop, where he has a desk, his own computer, code machine, two other key duplicators, blanks, tools, supplies, and manuals. (See photograph 2.)



2. Bob Entis, hospital locksmith.

This is an interview with Bob Entis:

*The National Locksmith: What do you do in your job on a daily basis?*

Bob: In addition to the main hospital, I take care of five other hospital buildings. I work with requisitions that are sent to me for work needed done. It keeps me very busy with all the lock changes, repair work and installation in new facilities.

We have a variety of locks, mostly Schlage, but we are also going into some high security. Anyway, I maintain the master key system, and on any new building I set up the system and incorporate it with the existing system.

*The National Locksmith: Do you have to do anything else other than lock work, like door repair?*

Bob: No, that is done by the maintenance crew, but sometimes, because I work for security, I have to help with a combative patient because I am in plain clothes. I seldom have to do car openings for doctors or patients, because the security crew has tools and manuals to take care of this. I would be tied up constantly with that.

*The National Locksmith: How do you spend an average day?*

Bob: Well, there are priorities such as the narcotics locks. If the keys are taken home, it's a federal policy that the lock has to be changed, so things like that are top priority. I make keys that are requested for departments, do the repair work, or whatever the requisitions ask for.

*The National Locksmith: Do you know where all the keys are all the time?*

Bob: The department heads do. My computer tells me how many keys are out.

*The National Locksmith: Do you use any push button type locks in the hospital?*

Bob: We use a lot of them, and we have some electronic Essex that I work with.

*The National Locksmith: Any card access?*

Bob: We are thinking about going with that on our exterior doors; that's in the works, and I will be installing that for them. Other work that I get once in a while is changing the combinations on safes. We very seldom get a lockout.

*The National Locksmith: What training have you had for this job?*

Bob: I have been a locksmith for 21 years, and have been with the hospital for five years. I started in Cleveland, Ohio with one of the oldest key shops there, Cleveland Key. I was trained by men who had been in the field forty to fifty years. My sole training was on the job, and they taught me everything: picking locks, impressioning and everything under the sun.

After about four years, I bought an existing shop there and ran it for five years. Then I moved to Phoenix worked for a wholesale lock supply company, then managed the company about three years. This training gave me the knowledge of every product that was on the market.

*The National Locksmith: How did you get into this job?*

Bob: Well, the locksmith at the hospital asked me if I could help him, which I did, then he decided that he wanted a change, so the hospital asked me if I could take over the job. It is very difficult to secure an institutional locksmith job. It is a rather desirable position for one thing because of the benefits, retirement, raises and so on. There is in-house bidding, that is, if someone that works here is qualified, he or she would get the job.

*The National Locksmith: Anything*

Continued on page 80



## Changing Combinations

"I looked at the back of the combination lock cover and I knew that someone had changed the combination on this La Gard lock with an S&G change key."



by Dale Libby

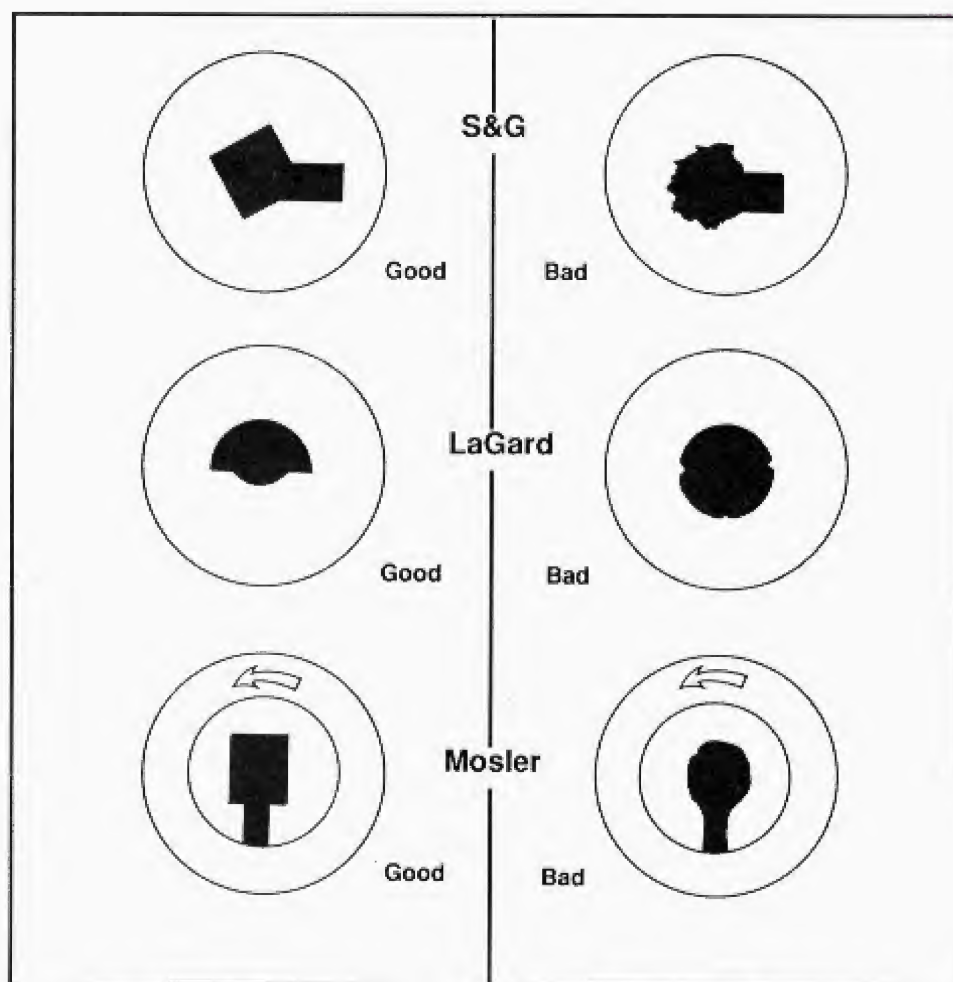
In an article a few months ago, I told a customer that I would not change the combination on his safe. The reason for this was immediately apparent when I looked at the back of the combination lock cover. The change key hole was rounded out. Some supposed safe technician had tried to change a LaGard 3300 safe lock with a Sargent and Greenleaf change key. (See illustration 1.)

Whether he was successful or not is open to opinion. The combination was changed, but the wheels are probably sprung. The customer then asked me to just change the cover of the lock and use the correct change key. I said, that in this specific case, that would be a bad idea. I will explain my reasoning as I did to him.

**LaGard Locks:** Since this was the specific lock that generated this article, I will address it first. The LaGard lock uses a specially designed wheel with a friction as opposed to a gear system of locking the inner and outer hubs. When the correct combination change key is inserted into the lock and turned a specific direction it unlocks the inner and outer hub. This releases a hook retainer from the outer hub, and allows the inner hub to turn and be aligned to a new combination number.

The distance the hook is to be moved is specific. If it is moved too far out away from the inner hub, some of the spring tension is over-taxed. The hook will not fit as tightly as it is designed to do, and the possibility of a creeping or lost combination will exist. This may not only occur on the third wheel, but on all three wheels.

If I see this on a LaGard lock, then I know that the lock is shot. I tell the customer that I cannot be responsible for



a lock where the wrong change key has been used. If the lock is working, I will still take the cover off and check for mounting screw and change key tightness. I will not change the combination, however unless I sell the customer a new lock.

As a word of salesmanship, I will not sell a combination lock unless I install it myself. For only then, do I know that it is installed correctly. I also collect a good fee for the installation of the new lock. This is why I can guarantee the lock as well as my work.

**S & G and PPI.** There is a difference with these types of key change combination locks. These lock wheels are geared and will take a lot more punishment than the LaGard locks will.

Instead of moving a hook out of the way, these locks have an inner cam arrangement that spread apart fingers and teeth when the cam is turned.

Although unusual, I have seen these change key holes on the combination lock cover rounded out. This was probably done with some type of allen or hex wrench. Anyway, the results are the same. Depending on the severity of the deformation, these locks can be repaired to a certain degree.

As far as I am concerned, a new lock is called for. With proper servicing these locks can be put back into a neutral position and a new combination set.

The first step is to replace the back cover. Make sure the change key hole is

*Continued on page 74*



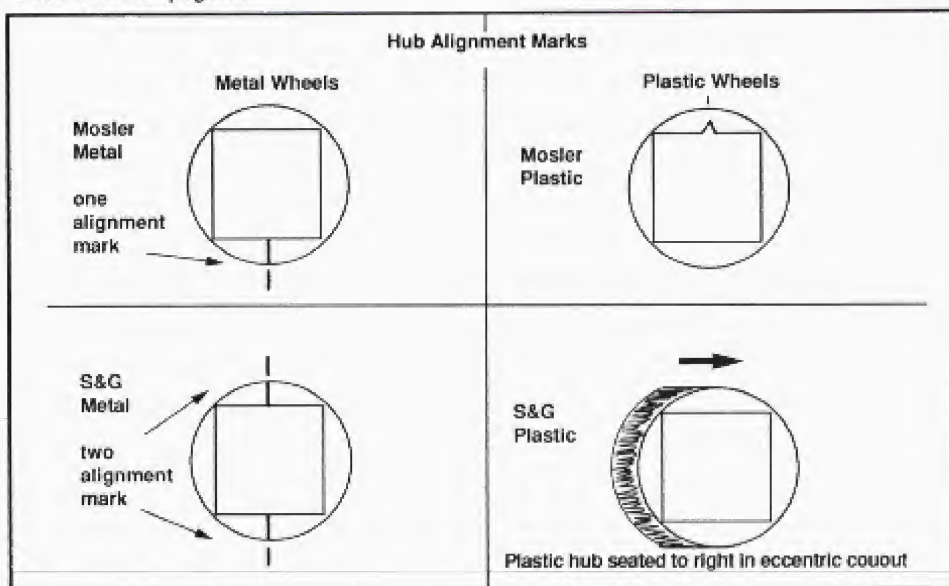
Continued from page 71



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set for either the change key index or the zero change index. Now remove the back cover and inspect the wheel pack. If it is a plastic wheel pack, my own suggestion is to replace the lock with a unit that has metal wheels. (See illustration 2.)

The next thing to check is to see that all the hub markers are aligned with the marks on the wheel itself. This can be done while the wheels are still on the wheel post, but if you must, remove the wheels for close inspection.

If the combination was changed without the correct change key tool, one or more of these hubs will be in the wrong position. The inner and outer hubs must be aligned. It is easiest to remove the wheels and do this by hand. It cannot be done without individual inspection of each hub. Just do not push down the change key until it fits.

Once the hubs are aligned, the wheels should be put back on the post, with the spacers in the correct order. The wheel pack can be set to the change position by aligning the gates with the end of the change key. The wheels are then turned counter-clockwise until the gates are stopped by the drop lever. In this position, when the cover had been installed, the change key will enter the wheel pack. I learned this by watching an S&G video.

Change the combination to a single number (4 times left to 50, for example). Then remove the cover and dial the combination in both directions. Watch the wheel gates for alignment, and watch for wheel slippage when reversing direction.

Put a little pressure on the edge of the wheel pack with your finger and again dial the combination. All gates should line up exactly. If they do not, then it is time for a new combination lock. When in doubt, sell the customer a new lock. It will save on service calls, and wasted time, and customer dissatisfaction.

**Mosler:** "I ain't afraid of NO Mosler" is what is printed on my business card. This statement is true within limitations. I have sweated for many hours against Mosler money chests that were recombined incorrectly. I do not know if this was from using the incorrect change key, or just sloppy procedures.

Mosler used many lock covers with change key holes on locks that are hand changeable. This was true on the 302-402 models. The Mosler change key hole is square. Mosler also made key changeable wheels out of metal and plastic. The metal wheels had a hub alignment mark on the outside of the wheels. The plastic wheels have a little nick out of the inside of the hub that must point toward the combination wheel post.

Again, disassemble, reassemble, and test. If there are any problems, then the lock must be replaced.

**Why not replace all locks?** In the real world, there are many problems. First, not all locks are standard. Most locks now will retrofit the standard Group II configuration that includes Mosler, LaGard, PPI, and Sargent and Greenleaf, not to mention several imported Group II models. There are, variations, however on the bolt work. Some locks use extended bolts or bolts with large extensions attached or screwed onto the end. This is true on money chest applications where large blocker bolts are drilled and tapped to attach to the end of the combination lock bolt.

With these lock applications, it is much easier to try and repair or reset the wheels than to replace the whole lock. What must be done in any particular application is left to the good judgement of the safe technician. Hopefully he will make the right choice. Open and Prosper!

§



# Security Lighting

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"A security lighting system presents a logical deterrent to crime. A locksmith can easily install most types of home security lighting systems."

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by Art Hoffman

In this article, we'll talk about one simple area of security that can be added to many locksmith's businesses. Most people respect the advice of their locksmith when physical security is of concern. You've all probably heard questions like "What lock do you recommend?" but how many of you have heard "How can I reduce the odds of a successful break-in?" Often, the answers should be given prior to the question if the advice is to be of any help. Thoughtful security advice will result in increased business for you in addition to more satisfied customers.

Granted, you already offer assistance when you see room for improvement in

a customer's security practices. Though, by taking a slightly different approach, you may be able to offer a broader range of services.

Before your customer receives a deadbolt, security chain or night latch, a multitude of potential security flaws should be addressed. The subject of the "weak link" must be considered by someone other than the prospective burglar. A weak link may be an open window or a broken porch light, anything that will compromise one or more of the goals of physical security.

**Security Lighting.** Since a good deal of theft and vandalism occurs at night, a security lighting system is a logical deterrent. Effective security

lighting is less expensive and requires less maintenance than most people think. As is the case with locks, most lighting components can be purchased at hardware stores and lumber yards, though many people would gladly pay more for professional installation.

Any locksmith who has installed a knobset, door check or hung a door can mount an outdoor light fixture with one hand tied behind his back. And installation of the electrical requires no more skill than is needed to install a new 110 volt outlet. You already have all the tools and equipment necessary to install lighting systems, with the possible exception of a taller ladder.

**Types of Lights.** Mercury Vapor:

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Due to two primary requirements of outdoor lighting (coverage area and cost efficiency), this is the system of choice for homes. The bulb contains an internal capsule of high pressure gas which enables it to produce more 2 to 3 times more lumens per watt than in incandescent lamps. This translates to a lower wattage requirement. Mercury vapor bulbs have a far greater life than most other types. Bulb prices typically range from \$6 to \$15.

**High Pressure Sodium (HPS):** These lamps are similar to mercury vapor, but they produce 5 to 6 times more lumens per watt than incandescent lamps. Although this is the most cost effective form of security lighting, homeowners usually opt for mercury vapor due to the considerably higher bulb cost of sodium. A visible difference between these types of lamps is the color of the light they produce (sodium: slightly pink or yellow, mercury: slightly blue). Bulbs aren't often cheaper than \$14 each.

**Quartz Halogen/Metal Halide:** These too, are vapor lamps. They produce anywhere from 4 to 5 times more lumens per watt than incandescent lamps. On the down side, they generate more heat and are shorter lived than other vapor lamps. On the up side, they still last longer than incandescents and they have "instant-on" and "dimming" capability (unlike mercury and sodium). Bulb prices typically range from \$3 to \$10 each.

**Fluorescent:** These lamps produce 2 to 3 times more lumens per watt than incandescent lamps and last longer, though not as long as vapor lamps. Fluorescent lights are not commonly produced in higher watt sizes and are less tolerant of great temperature changes, thus are not often used for larger outdoor applications.

In a nutshell, any of the above listed lights will illuminate more area per energy dollar than Thomas Edison's masterpiece.

**Switches and Controls.** **Timer Control:** For our purposes, timers are a thing of the past. Due to constantly changing daylight periods, they require constant attention if they are to perform their intended tasks (to turn lights on at night and off during the day). To overcome this matter, many users merely set their timers to activate at the earliest possible sunrise and deactivate at the latest possible sunset. Needless to say, this substantially hurts cost

efficiency and bulb life.

**Photoelectric Control:** Photoelectric sensors have been readily available for consumer applications since the early '80's. They offer the exact result that the timer was supposed to achieve. They activate at dusk and extinguish at dawn. Today, numerous photoelectric controlled lights are on the market. Some offer sensitivity adjustment, though few actually require any change from the original factory setting. The preferred bulb types here are mercury and sodium. Prices for complete fixtures (including bulbs) vary between \$15 and \$200 with a mean price of approximately \$30 each.

**Passive Infra Red (PIR) Control:** Incandescent (primarily, standard flood lamps) and quartz halogen lights are the most suitable recipients of infra red sensors. These activate the light when their beam is blocked and remain on for a preset delay period (usually 3 to 5 minutes). Sensitivity range of the beam can be as little as 5 feet or as great as 100 feet, allowing the light to be activated by a car in the driveway or a person on the porch. Many lighting units contain both photoelectric and PIR sensors so that the infra red beam only operates at night. Mercury and sodium lamps are not used here because they require a "warm-up" period to reach full illumination. Besides, efficiency is less critical for lights which are used for minutes rather than hours. Complete units (with two incandescent flood lights) start at \$20 each.

Both photoelectric and PIR sensors can also be purchased separately for use with existing systems.

**Installation.** The best location for mounting lighting fixtures is partly determined by the particular needs of your customer and partly by the general rules of security lighting. It should be situated well within the property border, as high as possible to reduce the likelihood of it being deliberately disabled. A high mounting location also allows maximum distribution of the light produced. A typical 75 watt mercury vapor lamp will lose its effectivity beyond 30 feet high. That, however should cover 200 to 250 square feet of ground.

The fixture should be mounted in an area where it can sufficiently illuminate the risk areas. For photoelectric controlled systems, the light should be sufficiently diffused so as not to give off a glare. Diffusion is not needed for infra red controlled spot lights. As a matter of fact, they are most

effective when they give off glaring light. If possible, it should shine in a direction that does not permit an intruder to easily see beyond it.

**Diffusion (scattering)** of light is most commonly caused by a frosted globe or lens.

Lamp posts enable the light to cover a greater area than building mounted fixtures. Mounting a small one (8 feet or less) is easier than putting in a fence post. Mounting a tall one (to 30 feet) will require a concrete base. The taller poles are segmented (usually in 6 to 8 foot sections) to allow hassle-free bulb replacement. Running electricity to the pole is the only obstacle. Stick to UL approved insulated cable and conduit. Bury the cable per local codes.

Even if the system is properly installed, tamper resistant features may still be helpful. Polycarbonate, fresnel and lexan lenses are stronger than glass or inexpensive plastic lenses. Wire lens cages are also available. Many fixtures are already equipped with one of these protective devices.

Security lighting is currently being installed by a relatively small number of locksmiths. Taking on security lighting doesn't require any additional inventory, skill or supplies, but it does mean more business. \$



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## Letters

Continued from page 8

### Ode To A Lockout Victim

Dear Marc:

First and foremost I would like to publicly thank Dave Mc Omie for his assistance on several occasions. He is a perfect gentleman to have helped me. Also, for your office who sent me particular copies of something I needed.

*The National Locksmith* is a fantastic magazine, that is both informative and educational. Please continue the good work.

Someone gave me the following:

*Hello Locksmith?*

*Unlike my noble better half  
who always knows what he's about,  
I have this vexing tendency  
to lock keys in and me out.*

*Shut out once more from car and house,  
I vow to mend my keyless way.*

*By keeping spares in pocketbook  
to unlock house and Chevrolet.*

*But still, despite my good intent,  
I'm on the outside in Chagrin.*

*I've locked the car and left the keys  
in my handbag there within.*

by Ruth E. Lancaster

Joe Noto  
Florida

### The Lighter Side

Continued from page 56

on stage, directly overhead. He wasn't making much head way.

"Mother Superior" had progressed from gentle tapping to banging, to tearful pleading, and now seemed to be shouting in unknown tongues.

"Never fear, Probasco's here," said Don, and a pathway opened through the crowd. Soon he had the door opened and "Mother Superior" on her way to "Climb Every Mountain," beautifully on cue.

"You know," Don said, after we had turned off the lights and snuggled down in our bed, "It's one thing to be locked out of a place, but locking yourself in!" he chuckled. "That requires a special kind of talent."

"You got that right!" I murmured to myself, smiling at my own little secret. §

### The Beginner's Corner

Continued from page 69

you would like to add?

Bob: It gets to be a demanding job. Things are constantly changing. It is rewarding, however because you get to do a lot of different things.

The Paradise Valley School District

employs two locksmiths, Jim Totman who has been there fifteen years, and Roger Hazel, eleven years. (See photograph 3.) This is a large school district with 29 schools, elementary through high school, plus buildings for the district office, facilities and construction, and transportation. Thanks to the efforts of Dale Leeper I was able to talk to Jim and Roger in their locksmith shop.



3. Roger Hazel (left) and Jim Totman.



4. Shop at Paradise Valley School Dist.

With as many buildings as these men take care of, you can imagine that this shop is top of the line. (See photograph 4.) The first thing we talked about was the computer, which is kept securely locked. Jim showed me how it worked. Entered on the computer is the master key system so there won't be any duplication with the locks. It will also set up a complete master key system for any new schools or buildings, no matter how many locks. Punch up a number of any key, without knowing who the manufacturer is, and it will list the names of all the manufacturers who use this number. They have an HPC Codemax key machine, which they plan to connect to the computer, to cut keys by code automatically.

Following is an interview with Roger and Jim.

*The National Locksmith: I see that you have a fully equipped shop.*

Roger: Yes, our computer is valuable to us as it eliminates any errors. As for equipment in the shop, it is more efficient for the school district to have modern equipment than it is to add manpower. Our supervisors have the foresight to see

that we are equipped. It's like our vans that are fully equipped as portable shops. They have their own generating system, with cutting machines, key blanks and supplies to take care of the work on site. We do a large amount of rebuilding, which probably makes us different than the average locksmith, in fact it's probably the largest part of the work we do.

Jim: "Yes, about 90 percent of our work is rebuilding all of our major locks that we use out there, panic bars and so on. We go in and do a full top to bottom rebuild. That's the number one service that we do for the schools, and that does help keep the cost down, rather than going out and buying new supplies and installing them.

*The National Locksmith: What category of locksmiths are you?*

Roger: We are journeymen locksmiths, and institutional locksmiths and that is something that a lot of people do not understand because it is a different type of locksmithing than the average. We do all aspects of locksmithing from safes, locks, padlocks, anything, but we do more of the repairing of this than replacing.

Jim: You need a good all around locksmithing knowledge to run a job like this, and there are things that we do that an outside locksmith wouldn't do. For instance, we will decode a desk lock and make a new key for it rather than throw the old lock away and replace it with a new lock. §

### Commentary

Continued from page 5

Additional instructors will offer individual assistance at the workstations to insure a thorough understanding of the subjects covered. The mailing lists the following dates and places for seminars.

Jonesboro, GA—July 16

Henderson, NC—July 23

Ocala, FL—July 30

Indianapolis, IN—August 6

Mankato, MN—August 27

Corsicana, TX—September 3.

Is one of these locations near you? If so, here is what the Ilco Unican seminar will be teaching to your local hardware stores in their six hour classroom style program. Topics include key blank identification, duplication and generation; Lock disassembly and reassembly procedures for Kwikset, Schlage, and Weiser locks; Plug removal techniques, including cylinder shimming and lock picking; Methods for repinning cylinders including keying alike, keying different, and masterkeying, and how to charge for these locksmith services.

Do you think that lock picking should be taught at a seminar attended not by